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ABSTRACT

The Mid-South Educational Research Association (MSERA) is a nonprofit organization with the purpose of encouraging quality educational research in the mid-south and promoting the application of results of quality research in the schools. This volume contains summaries of the papers, discussion sessions, display sessions, symposia, and training sessions presented at the 26th annual meeting. More than 300 abstracts are included, covering a wide range of topics. Most relate to elementary and secondary education, but some are concerned with higher education. Various aspects of instruction, assessment, educational improvement, teacher education, and equal education are considered. The constitution and by-laws of the MSERA are attached. (SLD)

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Mid-South Educational Research Association

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Twenty-Sixth Annual Meeting

Memphis, Tennessee

November 12-14, 1997

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PROCEEDINGS OF THE
TWENTY-SIXTH ANNUAL MEETING
OF THE
MID-SOUTH EDUCATIONAL RESEARCH ASSOCIATION

CONTAINING THE ABSTRACTS OF DISCUSSION SESSIONS,
DISPLAY SESSIONS, SYMPOSIA,
AND TRAINING SESSIONS

JOHN R. PETRY, EDITOR
KATHY POST, ASSISTANT EDITOR
LORRAINE ALLEN
ELIZABETH WELCH

NOVEMBER 12-14, 1997
MEMPHIS, TENNESSEE

MSERA
26th Annual Meeting

MSERA LEADERSHIP, 1997

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MSERA SESSIONS ARE OPEN ONLY TO MSERA MEMBERS WHO ARE REGISTERED AT THE ANNUAL MEETING. BADGES SHOULD BE WORN TO ALL SESSIONS TO ENSURE ADMISSION.

MSERA

The Mid-South Educational Research Association was organized on March 20, 1972, on the campus of The University of Mississippi. It is a non-profit organization whose purpose is to encourage quality educational research in the mid-south and to promote in the schools the application of the results of quality educational research. Any person who supports the purpose of the Association is eligible to join the Association.

MSERA Archives

Papers presented at the Annual Meeting of the Mid-South Educational Research Association are filed in the MSERA Archives at the Mitchell Memorial Library at Mississippi State University. Copies of papers may be obtained subsequently for a nominal fee by calling the Special Collections Room at the library at (601) 325-7680.

Proceedings, ISSN 1055-3959

MSERA
26th Annual Meeting

ACKNOWLEDGEMENTS

Several years ago Judy Boser mentioned the "*spirit of MSERA*" in her presidential "Acknowledgements." This year I have come to appreciate that spirit not just as a concept, but as a tangible reality. Many people literally stand in the wings ready to come to the aid of the organization. They do not wait to be asked: they see a need and go to work. Several such persons come to mind as I think about acknowledging specific contributions to MSERA:

Cliff Hofwolt, your Program Chair, who has done a remarkable job especially when times got tough. What a team player!

John Enger, your President-Elect, one of those people I mentioned who did not wait to be asked, but just volunteered and went to work.

Gerald Halpin, your Secretary-Treasurer, who performed that difficult task efficiently and effectively.

John Petry who prepared the *Proceedings* and served as your Executive Secretary.

Jim McLean who served as President of the Mid-South Educational Research Foundation and as Editor of *Research in the Schools* and whose primary concern was that the people who have assisted him be recognized.

Ernie Rakow, your Local Arrangements Chair. We all know what a job this is.

And then, there all the Board members, committee chairs, and committee members listed elsewhere in these Proceedings. I hope everyone will review the listing so you will know those who have been working to assure that the 1997 meeting of MSERA is just as successful as those which have come before and those yet to come. I have no doubt of the continued dedication to this organization by its members, and it heartens me to see the new members working their way into positions of importance. The *MSERA spirit* lives on!

I sincerely appreciate the organization which have allowed us all to serve MSERA and its worthwhile goals, especially those universities which have sponsored receptions for our members. And finally I thank the members of MSERA for allowing me to serve as your president. It is an honor which I shall always cherish.

Dorothy Durrett Reed
MSERA President, 1997

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ABSTRACTS OF DISCUSSION SESSIONS, DISPLAY SESSIONS, SYMPOSIA, AND TRAINING SESSIONS

9:00 a.m.-10:50 a.m. **GRADUATE ISSUES (Training Session - 2 hours)............. Louisiana**

LIFE AFTER GRADUATION: MORE THINGS YOU NEED TO KNOW ABOUT THE JOB MARKET

MODERATOR: Jimmy Carl Harris, Southeastern Louisiana University

PANELISTS: Barbara Allen, Southeastern Louisiana University; Gahan Bailey, Louisiana Tech; Shirley Becnel, Jefferson Parish (LA) Public Schools; Kathy Kramer Franklin, University of Arkansas at Little Rock; Glennelle Halpin, Auburn University; and Scott Norton, Louisiana Department of Education

A panel of deans, professors, state and district school officials, search committee members, and successful job-seekers, all with professional education positions within the MSERA region, offered a candid discussion of their expectations, standards, and experiences relative to the process of seeking and securing employment. This session was of particular interest to graduate students nearing graduation, as well as to anyone contemplating a job change.

The subjects covered included the nature of the job market (university and other), requirements for various positions, career patterns, and networking. The subjects also included the format and content of resumes and curricula vitae, cover letters, the interview process, follow-ups, and negotiating a contract.

The session began with panelist presentations based on their individual areas of expertise and experience. This was followed by an open discussion, during which the panelists interacted with the audience and with each other. Audience questions and comments were encouraged. A paper, containing guidelines provided by the panelists, was available to the audience.

9:00 a.m.-9:50 a.m. **MINORITY RECRUITMENT/RETENTION (Discussion Session).. Arkansas**

PRESIDER: Anisa Al-Khatab, Eastern Kentucky University

INCREASING THE RETENTION RATE OF AFRICAN AMERICAN COLLEGE STUDENTS

Clara Y. Young, Mississippi State University

The pursuit of formal education has long been perceived by African Americans as essential to economic, personal, and social success. Concomitantly, the struggles of African Americans to achieve educational excellence, equality, and equity is critically linked to the successful retention and graduation of African American students in higher education.

Educators and administrators have been concerned about African American student retention in higher education and ways to increase retention rates elicited concerned attention in the eighties. There are ample data related to the increased enrollment of African American students in higher education. However, these data show that retention, persistence, and graduation rates of African American students has declined, particularly in teacher education. In response to the absence of persistence and apparent high attrition of African American students in predominantly European American institutions, many colleges and universities have initiated retention programs designed to reduce the attrition rates and increase graduation rates of African American students.

But, can an institutional retention program, maintained by one or two persons within the institutional structure, address the needs of all African American students? Apparently not, because retention rates have not decreased significantly. Therefore, as educators, we must work to diligently increase the number of African American students entering education and the work force. As a result of data collected from a study regarding the retention of preservice teachers, it was hypothesized that retention programs sponsored by major related departments or colleges will better respond to the needs of African American students pursuing degrees within those majors.

THE INSTRUMENT EVALUATION REPORT ABOUT THE CHINESE STUDENT ATTITUDE INVENTORY OF THE AMERICAN EXPERIENCE

Ming Lei, The University of Alabama

The purpose of the study was to evaluate the instrument of The Chinese Student Attitude Inventory of the American Experience. The original instrument created was a 32-item inventory. The subjects of the inventory were the Chinese students who have entered an American university for at least four months. Thirty-eight subjects were selected for the pilot study. Most of them were the Chinese students studying in the Graduate School of The University of Alabama. Others were graduate students studying in the other American universities. Five items from the original instrument were dropped. Item dropping increased the reliability of the instrument from 0.857 to 0.883. It also increased the internal consistency and consequently increased the validity.

The following five dimensions were obtained from a principle component factor analysis solution with a varimax rotation: openness to change, opportunity, culture flexibility, communication, adaptation, and other. They explained 58% of the total variance.

EXPECTATIONS OF RACE AND SEX EFFECTS IN SUCCESS AND FAILURE IN CLASSES

David A. Saarnio and Bertha A. King,
Arkansas State University

It is common to hear that students believe some aspect of their person, such as their race or sex, influences their school achievement. Is that really true? Do students think that, for example, being an African American or being a female can influence how well a student does in school? The purpose of the present study was to examine that question. White and black high-school students (n=172; 60% female) were asked directly how often "racial/ethnic background" and "sex/gender" played a role in doing well in classes (successes), and (separately) how often they played a role when the students did not do well in classes (failures). Students rated frequency on a five-point "never" to "always" scale.

An omnibus repeated-measures analysis of variance yielded an interaction across race (of subject), attribute (race/sex), and success (success/failure). Follow-up analyses, separately for success and failure, yielded effects of "race" and "race x attribute" for successes, and of "race" and "sex" for failures. Black students believed that race plays much more of a role than white students believed (e.g., for successes, the group difference is approximately .7 standard deviations). Generally, females believed that there is less influence of sex or race than did males.

If part of success and achievement in school is the belief that one can achieve, and that there is a "level playing field" for everyone, then the data from this study are disturbing. Black students believed that race influences successes and failures. It would be expected that this type of belief would carry over, negatively, into the effort exerted in school, choices within school, and choices in continuing in school (e.g., going on to college).

9:00 a.m.-9:50 a.m. **COUNSELING (Discussion Session)**............................**Ridgelake**

PRESIDER: Ira E. Bogotch, University of New Orleans

COURSE IMPACT ON THE ATTITUDES, VALUES AND BELIEFS OF GRADUATE COUNSELING STUDENTS

Ann D. Chapman, Eastern Kentucky University

As students in our public schools become more diverse, school counselors must be able to work effectively with students from minority and diverse populations. This study had two purposes: (1) to obtain information regarding often ignored characteristics of counseling graduate students that have had a subtle but definite influence on the manner in which counselors work with clients from diverse populations, and (2) to determine if counseling courses have had any impact on these characteristics.

Based on D'Andrea's RESPECTFUL Counseling Model, a questionnaire containing open-ended items was developed. The items required subjects to describe their social, cultural, and economic attitudes, values, and beliefs. Subjects were also asked to describe what influence they believed these characteristics might have on the counseling process. During the first class period of personal adjustment, diversity, and community agency counseling courses, 144 graduate students at a regional public university were asked to respond to the questionnaire. During the final class period of each semester, subjects read their initial responses and described course-related changes. To ensure anonymity, codes were used to identify questionnaire forms. The open-ended responses were summarized and categorized. The results were analyzed using descriptive, case study, and quantitative (chi-square, percentages and t-tests) approaches.

The data revealed a lack of awareness among students regarding both the content and the potential counseling impact of their personal attitudes, values, and beliefs. Counseling courses appeared to have a low, but positive and encouraging, influence on this awareness.

Specific ways graduate counseling courses and teaching methodologies must change to help students develop an awareness of their attitudes, values, and beliefs and an understanding of how these personal characteristics can influence the counseling process were suggested.

THE ATTITUDES OF THE ELDERLY TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP

Jennifer C. Lewis, Mississippi State University

The purpose of this study was to determine the attitudes that adults over the age of 60 have toward seeking professional psychological help. The Attitude Toward Seeking Psychological Help Scale was used to obtain attitude scores from a sample of 26 persons from the American Association for Retired Persons in Starkville, Mississippi. The instrument was designed to obtain a total score based on attitudes measured among four components: recognition of need for psychotherapeutic help, stigma tolerance, interpersonal openness, and confidence in mental health practitioners. Differences based on age, gender, and previous psychological help were investigated.

The overall mean score obtained from the sample indicated a positive attitude toward seeking professional psychological help. A one-way analysis of variance was used to determine if differences in age groups existed; there were no significant differences in age groups. A significant effect for gender was found; males scored significantly higher on attitude scores than did females ($p < .05$). No differences were found between those who sought psychological help in the past.

The findings of the study express different results from the previous literature on the attitudes of the elderly toward seeking help. There has been an underutilization of the elderly in the mental health arena, and the researcher speculated that one reason was negative attitudes toward receiving mental health services. This study indicated that negative attitudes were not present, and other areas may need to be investigated.

A REVIEW OF UNIVERSITY COUNSELING CENTERS' EMERGENCY/ CRISIS RESPONSE PROCEDURES

Michele E. Caruso, Ann M. Bourgeois, and Vanessa C. Adams,
Nicholls State University

The purpose of this study was to review university counseling centers' emergency or crisis response procedures. Although literature regarding appropriate standards of emergency procedures for counseling centers was very limited, existing research indicated the importance of establishing such procedures in order to lessen the impact of a crisis or emergency.

Fourteen university counseling centers in a small southern state were contacted and requested to send a copy of their emergency procedures. These procedures were reviewed for the following elements: (1) after hours response, (2) resources used (i.e., psychiatric consultation, hospital access), (3) types of emergencies to which staff would respond, (4) whether or not emergency response services were limited to resident students, and (e) follow up. In addition to a general review, these elements were examined according to the following factors: (1) urban versus rural universities, (2) size of university, (3) number of counseling center staff, and (4) whether or not the counseling center was nationally accredited. Preliminary results indicated similarities between emergency response procedures but variation in the amount of detail included in the procedures.

9:00 a.m.-9:50 a.m. **DISTANCE EDUCATION (Discussion Session)................... Players**

PRESIDER: Robert L. Kennedy, University of Arkansas at Little Rock

RESEARCHING DISTANCE EDUCATION

Sharon K. Newbill, State University of West Georgia

Colleges and universities increasingly are using distance technology to supplant traditional classroom methods of instruction. Distance learning creates a unique learning environment in which the interactions between students and teachers are changed dramatically, and one in which the role of a third member, the on-site facilitator, assumes unusual importance. The uniqueness of the learning environment as created through distance technology in three studies was examined.

Facilitator and Student Roles and Performance in a High School Distance Education System

Elizabeth Kirby, State University of West Georgia

A qualitative study examined the roles and performances of classroom facilitators and students within the context of a high school distance education course. Data were gathered through observation, interview, and documents. The study suggested that the facilitator adopted roles (e.g., planning, management, climate) typically assumed by the instructor in a traditional setting. Student and facilitator performance were both affected by local factors (e.g., school calendar and bell schedule) and individual characteristics (e.g., facilitator background, student study skills, and student motivation).

From a Distance: The Endorsement of ESOL Teachers

Jo-Anne Schick, State University of West Georgia

Students who had been enrolled in three ESOL (English for Speakers of Other Languages) Endorsement courses via GSAMS (Georgia Statewide Academic and Medical System) completed a series of course evaluations that measured their perceptions of the effectiveness of distance education format as an instructional system. Students expressed moderate satisfaction with the level of content knowledge gained via distance technology, as well as general dissatisfaction with aspects of the distance technology that disrupted instruction and communication.

The Validation of Effective Teaching Behaviors of Distance Instructors

Barbara McKenzie, Elizabeth Kirby, and Sharon K. Newbill,
State University of West Georgia

The study examined effective distance teaching behaviors using a questionnaire developed from distance literature. Distance coordinators, facilitators, and instructors from 30 colleges and universities throughout Georgia were asked to complete the questionnaire. Frequency of observed teaching behaviors and the importance of the behaviors were rated by respondents using a five-point scale. The results delimited effective teaching behaviors of distance instructors, which were then used to develop training guidelines for distance personnel.

The panel of presenters had taught various graduate courses using distance technology. The audience was invited to discuss their personal experiences with distance instructors.

INCREASING STUDENT SATISFACTION OF DISTANCE EDUCATION THROUGH THE USE OF INTERACTIVE MULTIMEDIA AS COMPARED TO TRADITIONAL STRATEGIES

Nancy C. Boling, Mississippi State University

The purpose of this study was to see if students would be more satisfied with the distance education experience if interactive multimedia were included in the distance learning process as compared to other traditional teaching strategies.

Health and physical education students (N=115) were asked to volunteer to participate in one of two distance education sessions that would present them with information on cardiac risk factors. This information was to be used in a class project on self assessment of their own cardiac risk factors. Students were asked to sign up for one of two sessions that would be held on consecutive nights. The subjects were located at remote sites and received interactive (two-way audio/two-way video), lecture-based, distance education instruction. They were then randomly assigned to one of three groups--individual study, cooperative learning, or interactive multimedia. Each group was given five minutes of instructions pertinent to the treatment. After receiving the treatment, the subjects were given a satisfaction inventory. The procedure was repeated the following night with the other half of the subjects.

A one-way analysis of variance (ANOVA) was conducted on the satisfaction scores on the distance education session alone, on the study session alone, and on the overall learning experience (the combined distance education lecture and study session). A Fisher LSD was used as the follow-up test for each measure. There were no significant differences in the distance education session satisfaction scores among the groups. The interactive multimedia group had a significantly higher satisfaction rate with the study session and the overall learning experience than the other two groups.

Students were more satisfied with the distance education experience when interactive multimedia were incorporated.

IS DISTANCE EDUCATION THE KEY TO DELIVERING INSTRUCTION IN THE 21ST CENTURY?

Connie A. Jones, and Diane S. Gower,
Middle Tennessee State University

Student populations at many colleges and universities are increasing. These large numbers are staining facilities and resources available for instructional purposes. At the same time, higher education is facing the constraints of providing quality, cost effective education with a shrinking pool of money.

The age at which students begin or return to school and the experiences of students have become increasingly diverse. Nontraditional students with ties to home community in which they live are becoming the norm. A major concern in meeting the educational needs of this unique population is how instruction can be provided to persons living beyond a customary driving radius.

As a result of these and other trends it has become evident that alternative methods of providing instruction should be sought to meet the evolving needs of students. Distance education provides a means of allowing nontraditional students an avenue for completing a bachelor's degree.

9:00 a.m.-9:50 a.m. **MULTICULTURAL EDUCATION**
(Discussion Session)..Missouri

PRESIDER: Barbara Young, Middle Tennessee State University

THEORIZING MULTICULTURAL EDUCATION: POLITICS OF CULTURE AND PEDAGOGY

Aziz Talbani, The University of Memphis

This presentation was a critical analysis of the ambiguities surrounding theoretical issues in multicultural education. The study discussed the following issues: (1) critiquing the politics of culture in education, specifically to analyze the hegemonic and oppressive aspects of "cultures" and their roles in defining boundaries, excluding "others," and controlling members within the group, and (2) critiquing approaches that are taken to include so-called minority experiences, histories, and narratives in curricula.

The critical examination of enormous literature on multiculturalism has indicated that theorists in multicultural field have constructed a culture in which a set of unexamined assumptions are upheld regarding the nature of multicultural principles and social construct that result thereof.

One such assumption is related to the classification and scope of so-called "ethnic" cultures, their function in society and their relationship with individuals. Multicultural theorists have legitimized cultural norms through inclusion in curricula and as principles of policy making. A culture is also an instrument of power and control in which individual rights and freedoms are curtailed. In multicultural debates, the inner dynamics of ethnic cultures that often establish their hegemony over individuals have been ignored, and issues of power and control within these cultures have not been addressed.

In the political process of selection of pedagogical knowledge, the multicultural writers play the role of cultural mediators in which they often exclude from the curriculum an individual's struggle, dissent, and resistance within the cultural community. This approach to knowledge selection and curriculum development tends to be past oriented, ignoring specific conditions in which students are constructing their cultural world. It also uses broad umbrella terms and generalizations to eliminate variations and differences among groups and subgroups.

Hence, the study argued that multiculturalism has failed to deliver pedagogic change and social reforms that it promises.

OUTSIDERS ON THE INSIDE: THE CULTURAL ACCEPTANCE OF MINORITIES IN A MOSTLY WHITE CLASSROOM

Michael S. Page, Louisiana Tech University

The purpose of this qualitative study was to ascertain the level of "cultural acceptance" inherent in a mostly-white educational setting. Qualitative data were gathered from a seventh-grade class of 28 students (five of whom were minorities) at a university laboratory school. Using an intrinsic focus, emerging themes were sought that would indicate constitutional patterns of importance. Participant observations, unstructured interviewing, key informants, survey responses, photography, and member checks were employed to gather the needed data.

The minority students, with few exceptions, appeared to maintain a certain "distance" from their white peers. While there were several indications that the minority students were attempting integration, there was little tendency on the part of white students to invite a minority student into a white social setting.

The study appeared to have shed light on certain controversial issues. For instance, can "integrationists" find valuable ammunition in studies such as these? Do the exclusionary practices of white students toward minority students constitute a call for a reemergence of desegregation? Other possible implications focused on cross-grade factors and the teacher's role in race-related inclusion.

AN INVESTIGATION OF THE MULTICULTURAL PERCEPTIONS OF SELECTED SECONDARY SOCIAL STUDIES STUDENT TEACHERS

Evelyn B. Homan and William A. Person,
Mississippi State University

With the changing of the public school demographics, i.e., more students from culturally diverse backgrounds and fewer teachers who share similar backgrounds with their students, teachers need to become more aware of and sensitive to the academic development of all of their students.

The purpose of this study was to investigate the multicultural perceptions and attitudinal shifts, if any, of selected preservice social studies teachers at Mississippi State University during their student teaching experiences. The research design for this study was qualitative, using observations, interviews, and document analyses. There were six subjects in this study.

The data for this study were analyzed using the case study method. The researcher observed the six student teachers six times over the course of the semester. At the end of the semester, the researcher, using the case study protocol, interviewed the student teachers and the supervising teachers to gather insight into each case study. The researcher also analyzed several documents that were used to gather information. The MPI, TAI, and MTAI were used to gather descriptive statistics for the researcher in helping to get qualitative data.

The six student teachers in this study did not demonstrate the sensitivity, attitudes and beliefs, knowledge of cultures, and application of cultural information to provide the opportunity for the successful academic performance of culturally diverse students. While the majority of the student teachers were sensitive and portrayed a favorable attitude, the majority also did not demonstrate the knowledge of cultural diversity or the application of cultural information.

Based on the findings of this research, six recommendations for teacher education program improvement and seven recommendations for further study were offered in order to enhance the preparation of preservice teachers to work with culturally diverse students so they are successful in the classroom.

10:00 a.m.-10:50 a.m. SCHOOL RESTRUCTURING
(Symposium Session)..Arkansas

STRATEGIES AND DESIGNS FOR IMPROVING INSTRUCTION IN HIGH-POVERTY SCHOOLS

ORGANIZERS: Steven M. Ross and Lana J. Smith, The University of Memphis

DISCUSSANT: Marty Alberg, The University of Memphis

Overview

During the past year, the presenters implemented and evaluated several restructuring programs designed to help at-risk children succeed academically. This symposium consisted of three papers describing these programs and their research outcomes. Both curriculum and research materials were shared with audience members. Audience reactions and questions were invited.

The Relationship Between Implementation Quality of "Success For All" and Student Achievement in Eight Inner-City Schools

Lana J. Smith, Steven M. Ross, and Tracey Lewis,
The University of Memphis

The "Success for All" model (Slavin et al., 1994) is designed to prepare at-risk children to perform at grade level by the third grade through strategies consisting of (1) cross-grade regrouping in language arts, (2) individual tutoring, (3) reduced class sizes, and (4) cooperative learning. This paper described the evaluation of SFA at eight elementary schools in Memphis, Tennessee, in which implementation quality was treated as a factor in assessing student achievement in reading.

Restructuring Schools to Improve Educational Outcomes: Formative Evaluation of the New American Schools Scale-Up in Thirty-four Memphis City Schools

Steven M. Ross and Mary McNelis, The University of Memphis

Following a three-year development period, nine school restructuring models are being disseminated nation-wide as part of the New American Schools Phase II Scale-Up. Memphis City Schools (MCS) was named in 1995 as one of 10 jurisdictions that would begin implementing the "break-the-mold" models. This study presented process and formative evaluation results pertaining to 34 schools' interest and selection of models, teacher training, implementation, and second-year outcomes in 1996-97.

Using Peer Tutoring Training to Increase the Effectiveness of Cooperative Learning in an Inner-City School

Leslie Nath, The University of Memphis

A difficulty in using cooperative learning methods in elementary school concerns children's inexperience with communicating and collaborating with peers. In the present study, a literature-based tutor-training program was designed and implemented in six classes (grades 2-6) in an inner-city school. Half of the students in the classes did not receive such training, and thereby served as controls. Outcomes from systematic observations, teacher surveys, and interviews showed clear advantages in collaborative skills among the training group. The training model, the study design, and the findings were discussed.

10:00 a.m.-10:50 a.m. **SCIENCE EDUCATION (Discussion Session)..................Ridgelake**

PRESIDER: Fred H. Groves, Northeast Louisiana University

FUTURE INVESTIGATORS EXPLORING SCIENCE THROUGH ACTION (FIESTA) - RESULTS FROM A NATIONAL SCIENCE FOUNDATION SUMMER SCIENCE CAMP

William J. Sumrall, Jo Ann Belk, and Michael Mott,
Mississippi State University

The purpose of the study was to determine the effect of process-skill-based science instruction, mentoring, and career education training on rising seventh- and eighth-grade African American children from Starkville and Oktibbeha county schools. Fifty children began the summer 1996 camp on the Mississippi State main campus. During the four-week residential camp, students received cross-science disciplinary (i.e., biology, chemistry, and physics) instruction in process skills, mentoring from African American scientists, math integration/instruction, and career counseling. A constructivist model was used in which students working in groups developed and formally presented their own observational and experimenting activities. Video taping was used as a method to improve presentation/communication skills of the camp participants.

A pre/post analysis of data determined that participants improved significantly ($p < .01$) in biology, chemistry, and physics knowledge. In addition, the participants improved significantly ($p < .01$) on a performance assessment test based on process skill obtainment. However, students did not show significant ($p < .05$) improvement on the Test for Integrated Process Skills (TIPS II).

Qualitative analysis of students perceptions about science, and career interests found both positive and negative images of science. Impact/influence of the FIESTA camp did not alter students' career plans with regard to becoming scientists or engineers.

THE IMPACT OF PROJECT 2061 ON SCIENCE EDUCATION IN NORTHEAST LOUISIANA CLASSROOMS

Paula B. Webb, Ouachita Parish (LA) School System,
and Ava F. Pugh, Northeast Louisiana University

The purpose of this study was to determine the effect that Project 2061 had on science education in the elementary and middle-senior high schools in the northeastern region of Louisiana. The tenets of Project 2061 were introduced to Louisiana educators during the 1992-1993 academic year by the Louisiana Systematic Initiatives Program (LaSIP). The 31-question study involved the use of descriptive research that was collected from classroom science teachers (K-12) in both public and private northeastern Louisiana schools. The survey was sent to 219 teachers in 18 schools. The participants (100%) had taught science classes at either the elementary or the middle high level in northeastern classrooms.

The collected evidence suggested that 97% of the surveyed educators rated science education as very important. Of the 83% of the teachers who suggested that hands-on investigations were at least of average importance, 60% actually conducted laboratory investigations. Whereas 70% of the teachers had access to computer labs located at their schools, only 18% had computers within their science classrooms. Although few provisions were made during the school day for teachers to strengthen their own science knowledge base and to learn innovative teaching procedures, 51% of the teachers took advantage of inservices conducted after school or on weekends. For the teacher who knew of LaSIP, 66% were familiar, and 30% had participated in summer projects. For all of the teachers surveyed, 54% taught science lessons using equipment and materials worth $500 or less.

Recommendations from the study indicated that funding for LaSIP and disseminating of the information be continued.

SCIENCE PROCESS SKILLS AND ATTITUDES OF PRESERVICE ELEMENTARY TEACHERS

Jan Downing and Tony Chamberlain,
University of Central Arkansas

The purpose of this investigation was to determine if there was a correlation between science process skills and attitudes toward science of preservice elementary teachers. Data were collected from a sample of 50 preservice teachers enrolled in a methods course during the semester directly before entering student teaching.

The Test of Integrated Process Skills II (TIPSII) was used to measure science process skills, and the Science Attitudes Scale (SAS) was used to measure attitudes toward science. Both instruments have been used frequently for similar investigations and have yielded satisfactory results. The SAS measures attitudes that include aspects of Teaching Efficacy, Confidence in Science, Prior Experience in Science Courses, Gender Bias, and Motivation.

The data were analyzed using a Pearson-moment r. A positive correlation was determined through analysis. The paper described five subscales used in the SAS and the correlation of each to the science process skills measured.

10:00 a.m.-10:50 a.m. **EXCEPTIONAL EDUCATION**
(Discussion Session).. **Players**

PRESIDER: Qaisar Sultana, Eastern Kentucky University

THE USE OF JUXTAPOSED POSITIVE AND NEGATIVE EXAMPLES IN TEACHING MATH PROBLEMS TO STUDENTS WITH LEARNING DISABILITIES

Hollis E. James, Auburn University .

The purpose of this presentation was to examine the impact of the use of juxtaposed positive and negative examples on the acquisition and transfer of math content by students with leaning disabilities. First, a review of research related to the performance of students with LD on transfer and generalization type exercises was presented. Emphasis was placed on the types of errors made and how errors related to instructional methods.

A detailed review of published research that documents the success of using juxtaposed examples in teaching math problems to this group followed. Success of this method in other areas was reviewed. An attempt was made to relate the success in non-math areas to instructional approaches in math.

The presentation concluded with an illustration of effective instruction using juxtaposed positive examples to teach math problems to students with LD. Examples of the use of this method in two other areas of learning were also presented.

THE PROFILING SYSTEM/USING PSYCHOLOGICAL TYPE AND LEARNING STYLE TO PROVIDE ADAPTATIONS FOR TEACHING METHODOLOGY IN THE REGULAR AND SPECIAL EDUCATION CLASSROOMS

Gisele A. Waters, Auburn University,
and Ed LaSage, University of Houston

The purpose of the Profiling System was to provide diagnostic and instructional resources to regular and special education teachers. The Profiling System was also designed to assess and diagnose learning difficulties in elementary age children. The System is a synthesis of literature and assessment instruments considered research based and educationally significant. Our product integrated a review of the research in a unique and resourceful utensil to be used by regular and special education teachers.

The Profiling System offers various academic, diagnostic, and behavioral assessment instruments. After administration of the desired assessments, teaching strategies and interventions are suggested to assist in preparing lesson plans and learning objectives. The teacher then designs appropriate tasks that account for a student's learning style and psychological type.

The teacher uses the System to determine a set of academic competencies and abilities based on suspected learning problems and difficulties. Accordingly, instructional interventions are then offered. Teachers use these interventions to modify, remediate, or accommodate the curriculum and learning objectives to suit individual needs based on their learning style and psychological type. A special feature of this resource is that the Profiler can be used as a prereferral mechanism in screening for possible learning disabilities. Teachers can use any combination of instruments to deal with fundamental questions about children's learning and their difficulties.

Teachers who have used the Profiler have found it useful as a diagnostic and prescriptive tool for adapting their teaching methodology. Integrating Special Education, Psychological Type, and Learning Style in an applications package for teaching adaptation, presents an interesting challenge for future research. This application can be used in classrooms, in creating individualized education plans, and in prereferral intervention into Special Education. Future research should consider using an integrated approach in searching for teaching methods for children with learning difficulties.

EFFECTIVE TEACHER PREPARATION FOR STUDENTS WITH LEARNING AND BEHAVIOR PROBLEMS: USING A DIRECT INSTRUCTION TRAINING MODEL

Craig Darch, Soobang Kim, and Susan Heyser, Auburn University

Direct Instruction (Darch, 1992) is a comprehensive model that covers the details of curriculum design, teaching techniques for low performing students, implementing policy, and teacher training and evaluation. The purpose of this presentation was to describe the Direct Instruction Training Program and to suggest that this model is particularly applicable to training teachers to work with students in general and special education.

The first section was a presentation of the components of the Direct Instruction Model. The authors discussed how teachers are trained in the area of curriculum design for students with learning and behavior problems. Next, they presented how teachers are taught direct instruction teaching techniques. In addition, a thorough discussion was presented of the field-based practica sequence and how supervision is implemented.

In the final section of this presentation was a discussion of the results of several evaluation studies designed to look at the effectiveness of the Direct Instruction Training Model. The initial evaluation took place during preservice training, while under the direct university supervision in the program; the second evaluation occurred during inservice (post graduation placement). Finally, the reading and spelling performance of students placed with teachers trained in Direct Instruction was assessed and compared to students taught with traditional methods. The results of each of these studies suggested that a Direct Instruction Teacher Training Model was effective for training teachers to work with students with learning and behavior problems.

10:00 a.m.-10:50 a.m. **EARLY CHILDHOOD EDUCATION**
(Discussion Session)..Missouri

PRESIDER: Charles W. Davidson, University of Southern Mississippi

DEVELOPMENT OF THE INTRINSIC MOTIVATION SCALE FOR YOUNG CHILDREN

Martha P. Carlton, The University of Alabama

Motivation is felt by some theorists to be the most important element in the development of academic competence. Many children experience difficulty succeeding in academic learning situations. In our attempts as educators to remediate these difficulties, we try to find a cause for the failure, often placing the blame on a specific skill deficit. Often, however, the problem is much larger and all encompassing. The trouble may be actually one of motivation rather than a deficit in any one specific area, but the motivational issue is often overlooked. This oversight could be because educators frequently view motivation as something that teachers must give to students, rather than an attribute located within the child. Being able to remediate in the area of motivation could have far reaching consequences for education. Before remediation could take place, however, a valid and reliable instrument for assessing motivation is needed. While there is such an instrument for older students, one has yet to be developed for younger students.

This presentation introduced the Intrinsic Motivation Scale for Young Children, which is currently in the development stage. This was the first report of an eight-item instrument that was pilot tested on 43 children (21 male, 22 female) ranging in age from 5 years, 1 month to 6 years, 11 months. The individually administered scale uses pictures and oral instructions, with students responding by pointing to their selected answer. The possible answers fall onto a four-point Likert-type scale. Encouraging reliabilities were found on this short measure, suggesting that instrument development continue. Content analysis indicated face validity for the scale. Work is ongoing with plans to revise and extend the instrument before field testing on a larger population. The results of this scale could prove useful for early childhood educators.

WHAT DO PRIMARY GRADE TEACHERS VALUE AS DEVELOPMENTALLY APPROPRIATE AND INAPPROPRIATE PRACTICES?

Dianne Lawler-Prince, David A. Saarnio, and Beverly Gilbert,
Arkansas State University, and Kim Wilbanks,
Nettleton (AR) Public Schools

The purpose of this study was to determine primary-grade teachers' values regarding developmentally appropriate and inappropriate practices as reflected in the Developmentally Appropriate Practice Guidelines (Bredekamp, 1987). Forty-two statements were selected, of which half were developmentally "inappropriate" practices (DIP) and half were "appropriate" practices (DAP) for primary grade students (six-, seven-, and eight-year-olds). Teachers (n = 48) participating in a state-funded "Model Rural" grant served as participants. A Q-sort technique was utilized, which required participants to select items on a continuum of "most" DAP and "most" DIP.

Misclassifications were infrequent, indicating that teachers were very knowledgeable about DAP vs. DIP. There also was a great deal of consistency in responses across schools, especially in those items selected as "most" DAP and DIP. This suggested commonality in what practices teachers value. The results indicated that primary-grade teachers consistently valued three DAP items as most DAP, and, therefore, as standing out above the rest (using binomial probabilities, the likelihood of these items being chosen as consistently by chance is very low). There also was strong consistency in what was viewed as DIP, and, therefore, not valued.

The results of this study suggested that teachers differentially valued individual developmentally appropriate practices. This suggested, but needs to be verified empirically, that teachers may emphasize certain aspects of Developmentally Appropriate Practice in class, and not emphasize others. A greater understanding of teacher beliefs and behavior to understand how such differential emphasis impacts the educational process is needed.

EFFECTS OF AN INNOVATIVE PROGRAM THAT TARGETS PHYSICAL DEVELOPMENTAL, AND EMOTIONAL MATURITY LEVELS OF CHILDREN WHO MISS THE BIRTHDAY DEADLINE FOR ENTRANCE INTO KINDERGARTEN

Donald F. DeMoulin, The University of Tennessee-Martin,
and Camille Foren, Trenton (TN) Elementary School

The purpose of this study was to determine the effects of an innovative program entitled, "Kid Start," which addresses maturity issues of children whose birthdays fall outside the state-mandated time-frame to enter kindergarten. These children often display lower social, physical, intellectual, and/or emotional maturity than students whose birthdays fall within the specified time.

Raw scores for 41 students from 1993-97 were calculated before entering the "Kid Start" program and at the end of the school year using STEPS (Screening Tests for Education Prerequisite Skills) test, personal observations for readiness, and a developmental skills checklist. Pretest/posttest scores for each of the 14 measures of the STEPS test, three personal observations for readiness, and the 30 items of the developmental skills checklist were then transformed into stanine scores for statistical comparison using multivariate analysis and analysis of covariance. Data were also compared to 58 children who did not attend the "Kid Start" program but entered immediately into kindergarten.

Results indicated a mean significant gain in stanine scores ($p \leq .05$) in social, physical, intellectual, and emotional maturity and readiness. Results also indicated that children who attended the "Kid Start" program performed significantly better in each of the measures in kindergarten ($p \leq .05$) when compared to children who attended kindergarten only.

Results of this study indicated that children who attended the "Kid Start" program experienced more success and less failure because of the extra time and instruction given to obtain maturity and readiness skills for kindergarten.

10:00 a.m.-10:50 a.m. CULTURE (Display Session).. Players

AN EXAMINATION OF ORGANIZATIONAL CULTURE IN PUBLIC SCHOOLS

Bill Osborne and John L. Price, East Central University

Every organization is guided by a system of shared beliefs commonly referred to as Organizational Culture, and leaders must understand that culture before they attempt to move the organization in directions necessary for school improvement. However, most Organizational Culture Instruments have been developed with only one indicator of direction, an arithmetic mean, which is purported to indicate shared beliefs. These unidirectional measures have not presented a clear picture of group members' response variance on the questions asked in the survey.

The purpose of this descriptive study was to examine preliminary data collected utilizing an instrument designed to measure Organizational Culture based on the four clusters of confidence--represented by measures of recognition, celebration, and open communication; competence--represented by measures of trust, decision making involvement, and professional discretion; customs--represented by measures of grasp for new technology, tangible support, and experimentation; and, collegiality--represented by measures of staff expectations, protection of what is valued and important, and student traditions and common customs. Data collected for the clusters and respective measures (norms) came from schools in four states and represented 33 elementary schools, 10 junior high schools, and 14 high schools with a total "n" for all respondents of approximately 1200.

The data were examined for each of the clusters and respective norms and were analyzed in terms of the two dimensions of strength and congruence represented by arithmetic mean and standard deviation in order to present a clearer picture of the shared belief system of the members of the organizations. The findings showed that descriptive differences were evident in several of the norms associated with each of the clusters, and the data presented may help faculty and educational leaders better understand educational sites and systems as they plan for change.

A STUDY OF SELECTED CHARACTERISTICS OF MIGRANT STUDENTS

Robert Calvery, Southside Public Schools (AR), and Glenn Sheets
and David Bell, Arkansas Tech University

The purpose of this study was to provide demographics, educational needs, and legislation regarding migrant education. With 597,000 migrant students in the U.S., educators need to become aware of these children, their learning characteristics, and effective instructional strategies.

The typical migrant child is aged 2-12, Hispanic, living in poverty (average family income $7,500 per year), speaking in the home a language other than English, does not participate in school activities, works in the field to supplement family income or cares for younger siblings, and has completed 7.7 years of schooling.

Migrant students have unique educational needs stemming from mobility, work and family responsibilities, poverty, and language. Ultimately, decisions about where and when to move are based primarily on economic necessity. These moves are not built around the traditional school year, which causes considerable disruptions in the continuity of their education. Migrant students are markedly behind other students in both achievement and grade levels. Roughly three years are required for the average migrant student to progress one grade level.

This session presented what teachers need to know about migrant families and the special needs of migrant students. Teachers must be aware that these children and families exist. For many school systems these families are invisible, and they often do not come to the school unless the school takes the initiative to find them.

Migrant students present a challenge to our traditional system and, at the same time, they enrich it. Some of the enriching factors these students bring into our schools are their cultural and ethnic heritage and their knowledge of more than one language. They also have extensive travel experiences and much first-hand experience. Educators must build on the richness of students' experience and culture to make learning more meaningful.

NO LANDS MAN--AN ETHNOGRAPHIC STUDY OF THE MISSISSIPPI BAND OF CHOCTAW INDIANS

Pam Gamble, Kathy Post, and Amy Powell,
The University of Memphis

The purpose of the display was to promote an awareness of the history and accomplishments of the Mississippi Band of Choctaw Indians. The display was designed for use in adult education sessions at tribal locations, in secondary history classes at tribal schools, and at various museums and public tribal functions.

A visual time line of significant events in the history of the Mississippi Band of Choctaw Indians has been included in the display. A set of flash cards was developed to promote participation by tribal members who speak Choctaw as a primary language. A bulletin board including recent photographs was assembled to portray the contemporary environment on the tribal reservation. Historical artifacts and reproductions were included to facilitate active psycho-motor skill participation.

A forty-five minute video documentary was produced to summarize the historical research and to incorporate an on-site tour of the Mississippi Band of Choctaw Indians reservation, including the tribal school system and various economic enterprises.

Research papers, impact statements, observations, and background material were assembled in a portfolio. The display has served as a tool to promote public awareness for the Mississippi Band of Choctaw Indians. It has also been used as an example of an alternate form of presentation for research papers within the educational system. The format of the portfolio and the organization of the research team have been used as a model for cooperative learning.

11:00 a.m.-11:50 a.m. EDUCATIONAL REFORM
(Training Session - 1 hour)..Louisiana

BUILDING A DEMOCRATIC ENVIRONMENT FOR STUDENT ACHIEVEMENT THROUGH COLLABORATIVE DECISION MAKING OF SITE-BASED MANAGEMENT

John D. Light and Regina M. Watkins,
University of North Alabama

This training session engaged participants in the issues of developing stakeholders in "collaborative decision making" needs for school improvement. This training design was prompted at the request of a city school system enrolling approximately 10,000 students in 20 attendance centers for the purpose of initiating individual site-based school councils with the explicit goals of increased student achievement and improved school environment.

Utilizing the 11 correlates for "Effective Schools" as the foundation by which to examine school issues, strategies were designed for the training of school council members in the principles of democratic team leadership. These principles incorporated the concepts of consensus building, commitment to a clear mission, mutual support and encouragement, clearly defined roles, individual competency, empowering communication, and winning attitude.

The means of agenda selection and action strategies to include developing data for assessment were approached in the context of the 11 "Effective School" correlates and prioritized according to demographic and anecdotal data to include informal and formal assessment information and categorized about issues that could be developed immediately and/or developed as a strategic strategy. Belief statements, school values, and school mission statement were used as standards by which priority issues were selected.

District level leadership was an essential element in the development of this model. Linking specialized district level administrators to school based councils required the development of expectations, roles, and range of resources in fulfilling the school district mission. District level leadership and school councils stand as reciprocal constituents that required highly engaging and visible collaboration.

Presenters disseminated this model for democratic decision making. Attendees participated in simulation activities used in the training design.

11:00 a.m.-11:50 a.m. TEACHER EDUCATION (Symposium Session)................ Arkansas

REFORMING TEACHER EDUCATION AT EASTERN KENTUCKY UNIVERSITY

ORGANIZER: Kenneth Clawson, Eastern Kentucky University

Service Learning Requirement

Kenneth Clawson, Eastern
Kentucky University

Service learning is a blending of learning and service. All high school students in Kentucky must incorporate a service learning component in their curriculum in order to graduate from high school. Under the National Educational Goals, by the year 2000 " . . . all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy." One of the objectives states that "All students will be involved in activities that promote and demonstrate good citizenship, community service, and personal responsibility." In order to better prepare teachers, Eastern Kentucky University is incorporating a service learning component as a requirement for admission to the teacher education program and to be included as a part of each student's professional portfolio.

Early Field Experiences: A New Structure of Passage For Preservice Teachers

Anisa Al-Khatab, Eastern Kentucky University

Formulating a structure of passage for future teachers to experience other than student teaching to assist them in assimilating the culture of teaching and the classroom is a vital part of the revised teacher education program at Eastern Kentucky University. This paper examined the enhancement of the revised educational courses through augmenting field experiences to promote deeper conceptualization, better understanding, and increasing confidence and commitment of the new teaching force.

Redesigning the Undergraduate Course in Measurement And Evaluation in Schools

Beverly Klecker, Eastern Kentucky University

This undergraduate course remains a two-credit-hour course designed to provide the preservice teacher with a strong conceptual knowledge base through lecture, discussion, and activities. In the revised program, this course has been augmented with a weekly one-hour laboratory session. Students use this time to apply measurement and assessment principles as they construct classroom tests and design portfolio--and authentic--assessments. The classroom test construction project will become a part of the Preservice Teacher's Portfolio.

Human Development and Learning

Kenneth Clawson and Ann D. Chapman,
Eastern Kentucky University

All preservice teachers need an understanding of human development and how students learn. The restructuring of teacher education at Eastern Kentucky University has changed requirements from two three-credit-hour courses (one in human development and learning and one in learning theories) to one four-credit hour course with 30 hours of laboratory experiences of observation/participation. Teachers must have an understanding of the diverse array of students and be able to prepare them for a world where values and ideas evolve rapidly. Educational goals, teaching techniques, and assessment procedures must reflect this diversity. A constructivist approach is used. Emphasis is given to the teacher in a collaborative role as a team member with other teachers, specialists, parents, and the community. Classes are complex settings, and the application of knowledge and theories is emphasized.

11:00 a.m.-11:50 a.m. **MATHEMATICS EDUCATION**
(Discussion Session)...Ridgelake

PRESIDER: Pamela A. Taylor, Mississippi State University

THE FENNEMA-SHERMAN MATHEMATICS ANXIETY SCALE: EXPLORATORY AND CONFIRMATORY FACTOR ANALYSES

Richard Kazelskis and Carolyn Reeves-Kazelskis,
The University of Southern Mississippi

The present study examined the factor structure of the 12-item Fennema-Sherman Mathematics Anxiety Scale (MAS). A sample of 320 students enrolled in freshman-level college algebra classes from a university in the Southeast was divided randomly into two groups. The first sample's responses to the MAS were factor analyzed using a principal components analysis. Based on the number of eigenvalues greater than one, a screen test, and factor interpretability, a two-factor oblique solution was retained. The factors were identified as negative affect towards mathematics and positive affect towards mathematics. The items of the negative affect factor indicated feelings of discomfort, uneasiness, and confusion when dealing with mathematics, while the positive affect items reflected a sense of ease and the absence of fear when dealing with mathematics. Similar dimensions have been the focus of research in the area of mood. The negative affect factor is also similar to the negative affect reactions to the mathematics factor found in factor analyses of the Wigfield and Meece Math Anxiety Questionnaire.

To examine the stability of the factor solution across samples, a confirmatory factor analysis was carried out using the responses of the second sample. Results of the confirmatory analysis using program AMOS indicated that, although the two-factor oblique model provided a fairly good fit to the second sample data, some minor adjustments to the model were needed.

EFFECTS OF INTERSPERSING MATH PROBLEMS ON STUDENT PERFORMANCE AND PERCEPTION OF MATH ASSIGNMENTS: GETTING STUDENTS TO PREFER TO DO MORE

Gary L. Cates, Carrie E. Watkins, Katrina N. Rhymer,
Merilee McCurdy, and Christopher H. Skinner,
Mississippi State University

The purpose of this study was to determine the effects of interspersing brief multiplication problems on assignment preference. Measures of accuracy and completion rates were obtained from 81 college students across two experiments. Students also indicated which assignment they perceived to be most difficult, longer to complete, and which was more preferable for homework.

Experiment one required participants to work on two multiplication worksheets. One sheet consisted of 20 three-digit by two-digit multiplication problems. The other consisted of 25 three-digit by two-digit multiplication problems with a one-by-one problem interspersed every fourth problem. A dependent t-test of mean accuracy was not significant ($p>.05$), indicating that interspersing had no effect of accuracy rates. A dependent t-test of mean completion rate was significant ($p<.05$), indicating that interspersing increased the number of problems completed. A chi-square of independence on perceptions of effort and time to complete were significant ($p<.05$), indicating that students perceived interspersing assignments to require less effort and less time to complete. A chi-square of independence for assignment preference was also significant ($p<.05$), indicating that students preferred to complete the interspersing assignment despite the additional three-by-two items.

Experiment two was conducted to demonstrate control and to add internal validity to experiment one. The same procedure was used in experiment one with the exception that both worksheets had 20 problems with no interspersing. Dependent t-tests of mean completion and accuracy rates were not significant ($p>.05$), indicating students performed equally on both sheets. A chi-square of independence test on perceptions of time to complete, amount of effort, and assignment preference were not significant ($p>.05$), indicating that participants found both sheets to be comparable in difficulty, and length.

Interspersing brief multiplication problems increased the number of problems completed among college students. Students also perceived the interspersing sheet to take less time to complete and require less effort, and they preferred the longer interspersed assignment over a shorter assignment without the interspersing.

A COMPARISON OF PRESERVICE TEACHERS' MATHEMATICS ANXIETY BEFORE AND AFTER A METHODS CLASS EMPHASIZING MANIPULATIVES

Beth McCullouch Vinson and Tina Sloan, Athens State College,
and Regina Gresham, The University of Alabama

This investigation was conducted in an effort to determine changes in the levels of preservice teachers' mathematics anxiety as a function of their experiences in a methods class emphasizing the use of manipulatives. Discussions and activities focused on the development of conceptual knowledge before procedural knowledge (Bruner) and on making mathematics concepts more concrete (Piaget). The sample included 106 novices at Athens State College who participated in the methods class for K-6 teachers.

Two strategies were employed to gather data for the study at the beginning and ending of the quarter of class experiences using mathematics manipulatives. First, preservice teachers completed a 99-item, Likert-type questionnaire. Second, through the use of questionnaire-guided narrative interviews, some of the factors that influenced those levels of mathematics anxiety were determined. Quantitative comparisons were made between preservice teachers' own sense of mathematics anxiety at the beginning and ending of the quarter by utilizing univariate analysis of variance.

Findings revealed a statistically significant reduction of mathematics anxiety levels ($p<.05$). Results of the study have implications for teacher education programs concerning the measurement of mathematics anxiety levels among future teachers and the determination of specific contexts in which that anxiety can be interpreted and reduced.

11:00 a.m.-11:50 a.m. **STATISTICAL SIGNIFICANCE (Discussion Session)..Players**

PRESIDER: J. Jackson Barnette, Independent Consultant

HAS TESTING FOR STATISTICAL SIGNIFICANCE OUTLIVED ITS USEFULNESS?

James E. McLean and James M. Ernest, The University of Alabama at Birmingham

The research methodology literature in recent years has included a full frontal assault on statistical significance testing. An entire edition of a recent issue of Experimental Education explored this controversy. The purpose of this paper was to support the position that, while significance testing by itself may be flawed, it has not outlived its usefulness. However, it must be considered in combination with other criteria. Specifically, statistical significance is but one of three criteria that must be demonstrated to establish a position empirically. Statistical significance merely provides evidence that an event did not happen by chance. However, it provides no information about the meaningfulness (practical significance) of an event or if the event is reproducible. Thus, other researcher are supported who posit that statistical significance testing must be accompanied by judgments of the event's practical significance and replicability. However, the likelihood of a chance occurrence of an event must not be ignored. The fact that the importance of significance testing is reduced as sample size increases was acknowledged In large sample experiments, particularly those involving multiple variables, the role of significance testing diminished because even small differences are often statistically significant. In small sample studies where assumptions such as random sampling are practical, significance testing can be quite useful. It is important to remember that statistical significance is but one criterion useful to inferential researchers. In addition to statistical significance, practical significance, and replicability, researchers must also consider Type II Errors and sample size. Furthermore, researchers should not ignore other techniques such as confidence intervals. While all of these statistical concepts are related, they provide different types of information that assist researchers in making decisions.

A REVIEW OF STATISTICAL SIGNIFICANCE TESTING

Thomas W. Nix, The University of Alabama

In 1932 Sir Ronald Fisher published his landmark work describing how statistical significance testing could be used to test research hypotheses. Following this, the various sciences have embraced this method as the defining statistical test. However, as early as the fifties scholars were beginning to question the use of significance testing. Criticisms have, for the most part centered on the three major weaknesses of significance testing. First, significance testing and its associated metrics do not provide a directional effect magnitude measure. Secondly, it has a large sample size bias, and, most troubling, there is little control of Type II errors. These weaknesses have a major impact on educational studies since many of these studies are carried out with relatively small, sample sizes and many of the interesting studies in educational research have relatively small effect sizes that can be overlooked when Type II errors are not taken in to account.

Today, some in the psychological community are calling for the abandonment of significance testing, and at least one major university has deemphasized significance testing in its graduate psychology program. Recently, the APA established a task force to examine the issue. This paper examined the controversy surrounding significance testing, alternatives that have been proposed, and provided an update on the work of the APA task force.

11:00 a.m.-11:50 a.m. SUBSTANCE ABUSE (Discussion Session)....................... Missouri

PRESIDER: William A. Person, Mississippi State University

EFFECT OF LEARNING STYLE PREFERENCE ON DRINK REFUSAL KNOWLEDGE, SKILL ACQUISITION AND ATTRITION FOR SUBSTANCE ABUSERS IN AN OUTPATIENT DRUG AND ALCOHOL TREATMENT PROGRAM

Edward Currie, Mississippi State University

The incidence of alcohol and substance abuse problems is a growing concern. Nationally, there are many programs of treatment for addiction problems. Treatment programs should be designed and implemented for the greatest chance of success. This two-part study consisted of a quasi-experimental component, examining the effect of learning style on learning and attrition, and an ex post facto component, examining predictors of attrition. A major consideration in designing a treatment program is the use of psychoeducational approaches, that take into consideration the patient's abilities and preferences to learn strategies for maintaining a recovery program. In the first part of this study, 88 subjects were divided into four categories as defined by the Kolb LSI. The subjects were exposed to two instructional methods, believed to complement specific learning style categories. After counterbalancing the instructional methods and factoring out the covariate of IQ, performance on the SCT and DRQ were found to be nonsignificantly different across the four learning style groups F(3,79)=.663, p=.577 for the DRQ and F(8,87)= 1.740, p=.102 for latency and F(8,87)= 1.280, p=.266 for word number as measured by the SCT. In the second part of the quasi experimental study, statistically nonsignificant results were X2(3,N=88)= 2.361, p=.501 for treatment attrition among learning style categories.

The ex post facto component of this study examined various demographic, cognitive, and personality variables and attrition. A discriminant analysis was conducted and indicated an overall correct classification rate of 76% (N=252). The study's implication, indicated by the strength of the covariate IQ, was longer treatment duration for individuals with lower ability.

RELATIONSHIP OF RACE AND SEX TO THE USE OF DRUGS AND ALCOHOL FOR STUDENTS IN GRADES EIGHT, TEN, AND TWELVE

Ronald D. Adams and Mark E. Pitcock,
Western Kentucky University

The purpose of this study was to determine if sex and race were factors in the increased use of drugs and alcohol since 1990. Cohort groups were determined based on student responses to questions of ethnic origin and sex for the years 1989 through 1996. Specifically, groups were white males, African American males, Hispanic males, white females, African American females, and Hispanic females. Data were obtained from archived data provided by the Parent's Resources Institute for Drug Education, Inc. (PRIDE); data were collected from school-based surveys using the PRIDE Questionnaire.

Casual comparisons of cohort groups were made and presented graphically for grades eight, ten, and twelve across the eight-year period. Additional comparisons were made of the percent of drug increase from 1990, the year drug use was generally the lowest, to 1996, the most current data.

There were increases in cigarette use at all grade levels and across all cohort groups, particularly for African American students. Beer use did not appear to increase for all cohort groups except for Hispanic students at the tenth-grade level. However, there were moderate increases in the use of liquor by Hispanic and African American groups. Dramatic increases in the use of marijuana was observed for all groups and at each grade level with African American students showing the most dramatic increases in use rate. Cocaine and hallucinogen use was also dramatically up, particularly for younger students. Hallucinogen use was particularly high for white and Hispanic males.

These results suggested that adolescent drug use has increased at different rates for students of different racial backgrounds, of different sex, and at different grade levels. Such information should be important to schools and communities in planning prevention activities.

AFRICAN AMERICAN COLLEGE STUDENTS' BELIEFS ABOUT DRINKING

Jean E. Dabit and Katherine Dooley, Mississippi State University

The purpose of this study was to investigate the beliefs of African American college students toward alcohol consumption. The sample of college students was chosen from two state universities. One of the universities was a historically black university located in a metropolitan statistical area, and the second university was a historically white university located in a non-metropolitan area. The sample consisted of 47% men and 52% women and was representative of the respective undergraduate population at each institution.

The participants in this study totaled 201. The Beliefs about Drinking questionnaire was administered to students enrolled in selected core curriculum classes. The questionnaire consisted of 13 beliefs related to alcohol consumption. The students were asked to indicate on a Likert-type scale how much they agreed or disagreed with the attitude statements. Descriptive statistics were used to report on characteristics of the overall population as well as characteristics by gender, statistical area, and institution type.

The findings of this study presented an awareness of the beliefs about drinking of African American college students. This awareness is important in order to better understand the role of alcohol consumption among African American college students. Future alcohol studies should expand the list of cultural beliefs about drinking in this study. In addition, researchers should explore the attitudes of other ethnic college students toward drinking.

11:00 a.m.-11:50 a.m. **COLLEGE STUDENTS (Discussion Session)**...............**Parlor 104/106**

PRESIDER: E. Dean Butler, University of Memphis

AN EXAMINATION OF THE CHARACTERISTICS ATTRIBUTED TO SUCCESSFUL TEACHERS AT THE UNIVERSITY LEVEL

Gayle A. Juneau, Neelam Kher, and Roberta Donahue,
Northwestern State University of Louisiana

In the era of accountability, administrators and policy makers have underscored the need for quality teaching at the post-secondary level. To highlight the importance of teaching, the universities are supporting faculty development activities that will directly impact the effectiveness of pedagogic practices.

This review of literature focused on teaching behaviors that have been associated with successful learning outcomes for students at the postsecondary level. Thirty years of research in the field of teaching excellence has indicated that in varying degrees, several factors combine to yield successful teaching. These factors can be grouped into eight categories: (1) subject matter knowledge and competence, (2) planning and organization of teaching strategies, (3) to students as learners, (4) balancing student-centered orientation with subject-matter orientation, (5) creating and maintaining motivation for learning, (6) managing classroom issues and questions, (7) practicing effective communication skills, and (8) providing supporting resources.

Faculty play a major role in enhancing the quality of academic programs of a university. There is a growing recognition that faculty efforts in the teaching arena can contribute significantly to the university's reputation for offering quality academic programs. The teaching effectiveness factors identified through this review of literature have provided the basis for faculty development efforts.

ACADEMIC SUPPORT SERVICES AT A RURAL UNIVERSITY: STUDENTS' VIEWS OF NEEDS

Carlos Kelley and Nita Thornell,
Delta State University

While many studies have focused on the secondary academic preparation of rural students, very few of these have analyzed what rural students believe to be their greatest areas of need. Student views were considered important in planning to provide academic support resources since (1) students very often think of important issues that faculty have not considered, and (2) student responses may reveal that they are unaware of available resources and of their own needs. A 26-item survey of academic needs and resources was distributed to all 1,227 dormitory students at a rural Southeastern university. Subjects (N=502) responded at a 40.91% return rate. Less than 30% of respondents were aware of where they could go for help with reading skills and test-taking skills. Students perceived their own greatest needs areas as mathematics and test-taking skills. Students perceived the greatest needs of other students as writing and mathematics. A multivariate comparison was conducted of students' ratings of their own needs with their ratings about the perceived needs of other students. Students believed that other students needed more help (p<.01) than they did themselves. Patterns among 210 significant item intercorrelations were discussed, as perceived needs were related to GPA, number of semesters in college, and awareness of available support services.

CHOOSING A COLLEGE INSTRUCTOR: WHAT DO STUDENTS WANT?

Linda W. Morse, David T. Morse, and Christopher H. Skinner,
Mississippi State University

Most of the current research literature on college teacher effectiveness evaluation reports a range of factors relating to instructor and course characteristics such as gender and pedagogical ability as being indicators of how likely a student is to rate the instructor highly. This pilot study utilized both quantitative and qualitative techniques to investigate students' perceptions of factors they perceive as important in how they would rate an instructor, and what influences them in making choices among different types of instructors.

Participants included 66 undergraduates from a variety of majors who completed a three-part instrument comprising: (1) a 22-item Likert type format that asked them to rate the importance of course characteristics, instructor variables, and instructional techniques relative to judging the instructor's effectiveness (estimated reliability = .86); (2) eight scenarios of instructional situations in multiple choice format with four types of fictional instructors as choices for the desired instructor; and (3) two free-response descriptions of their best and worst college instructors.

Students highly rated in importance what they had learned in a course, test difficulty, availability of instructor-supplied study guides, good explanations, the instructor's friendliness, and the ability to make them think critically. They gave low importance to the instructor's gender and whether or not they told jokes. In contrast, they choose a kind, considerate female for a science class, and a professor who used humor but was able to stay on-topic for their choices of fictional instructors. Using maximum likelihood ratios, neither sex nor grade point average was significantly different for how students rated the importance of the various characteristics. Qualitative assessments indicated that students were likely to note the grade received when citing characteristics of effective or ineffective instructors. The study confirmed earlier research and also offered conflicting results for future investigation.

11:00 a.m.-11:50 a.m. TECHNOLOGY (Display Session)..................................Players

COMPUTERIZED ADAPTIVE MASTERY TESTING FOR THE CLASSROOM TEACHER: AN APPLICATION OF THE SEQUENTIAL PROBABILITY RATIO TEST DECISION MODEL

Malenna A. Sumrall and Ming Lei,
The University of Alabama

Computerized adaptive mastery testing offers several benefits in the classroom. Adaptive tests can be administered to students that are shorter in length than a standard paper and pencil test and that require no additional preparation by the classroom teacher. The Sequential Probability Ratio Test (SPRT) has been shown to provide a valid decision model for use in classroom mastery testing. It does not have the large sample size requirement of IRT-based decision models, and its calculations are simpler and more straightforward. This display session demonstrated a computerized mastery testing system based on SPRT. The system minimizes the amount of time required of teachers to prepare and grade tests, and it provides detailed information about both student performance and item performance. Samples of output were displayed, and the system was demonstrated on a lap-top computer.

STUDENT VIDEOTAPE EXCHANGE PROGRAM

Gloria Dansby-Giles and Marie Roos,
Jackson State University

The purpose of the Student Videotape Exchange Program was to infuse multicultural counseling components into a counseling practicum and internship course. The intent was to increase and enhance student interaction with individuals from different ethnic backgrounds, ages, and gender. Videotaped discussions were exchanged between students at Jackson State University (JSU) and Western Illinois University.

The class at JSU initiated the first round of videotaped discussions and questions. A response tape was produced by the students at Western Illinois University. The videotape exchange was the first attempt by the programs at both universities to initiate a multicultural exchange between a HBCU and a traditionally state-supported university. A pilot study of the student responses to a survey was shared.

The first section of the pilot study focused on student information such as theoretical orientation to counseling, experience in the field, types of jobs held, gender, age and interaction with special populations. The second half of the survey addressed counseling skills for prejudice prevention.

CHEMWORLD-PEDAGOGY: THE DEVELOPMENT OF CD-ROM TEACHING TOOLS FOR ELEMENTARY SCIENCE METHODS

Dawn A. Hofwolt and Clifford A. Hofwolt,
Vanderbilt University

ChemWorld - Pedagogy intended for use in elementary science methods courses is a companion to ChemWorld, which is used in Introductory Chemistry classes. The materials consist of three CD's and an accompanying program: ChemWorld for chemistry students and ChemWorld-Pedagogy for elementary science methods students.

The ChemWorld-Pedagogy version consists of teaching episodes in elementary schools that involve some aspect of chemistry. Students were asked to analyze these episodes for the quality of teaching, styles of teaching, and types of instructional strategies employed. ChemWorld-Pedagogy also contains various discrepant events that allows methods students to interact with related content. Real world applications were presented to help bridge the gap between classroom and the practical side of chemistry in which new materials are developed from research.

ChemWorld-Pedagogy is intended for students to use independent of class time. A number of case studies about science teaching were presented that extended the students' view of science teaching and allowed them to analyze teaching from multiple perspectives.

12:00 p.m.-1:50 p.m. STATISTICS (Training Session - 2 hours)........................Louisiana

INTRODUCTION TO HIERARCHICAL LINEAR MODELING: APPLICATIONS IN EDUCATIONAL RESEARCH

Theresa M. Akey and Frank Lawrence,
Auburn University

The purpose of the training session was to introduce educational researchers to applications of hierarchical linear modeling in educational research. A secondary purpose was to demonstrate the use of a popular computer software package (HLM 4.01 for Windows). The session was designed for individuals who had little or no experience with hierarchical linear modeling. In addition, it was assumed that the individuals attending the session had a working knowledge of regression procedures.

The session began with an introduction to the use of hierarchical linear modeling (HLM) with educational research problems. First, basic concepts and terms were described to familiarize the audience with the language of HLM, such as random and fixed effects, nested models, and hierarchical model testing. Second there was presented a discussion of the advantages of HLM methods over more traditional analyses. Third was the presentation of an overview of the potential applications of HLM used in educational research. Finally, steps in the process of data analysis and the logic of model hypothesis testing using HLM were illustrated. Also, different types of models (random-effects, random-coefficients, and means or slopes as outcomes models) were demonstrated; how to make decisions in model building was illustrated; model evaluation was discussed; and hypothesis testing was described.

The demonstration of the HLM data analysis process was conducted via the computer program, HLM 4.01 for Windows (Bryk & Raudenbush, 1996). Three applications were illustrated: (1) a cross-sectional, two-level example of students nested within classrooms, (2) a two-level growth curve model illustrating change in student achievement over time, and (3) a three-level model combining the first two models.

12:00 p.m.-12:50 p.m. LEADERSHIP (Discussion Session)..............................Arkansas

PRESIDER: Jimmy D. Lindsey, Southern University-Baton Rouge

ADMINISTRATORS FOR THE 21ST CENTURY: A SURVEY OF LEADERSHIP IN ALABAMA

Frances K. Kochan and William A. Spencer, Auburn University

The purposes of the study were to: (1) ascertain the demographic and professional characteristics of the leadership in Alabama public schools, (2) assess their eligibility and plans for retirement, (3) identify those factors that exert the strongest pressure to leave the job or retire, (4) identify those factors that had the most influence on the administrator's leadership style, (5) identify the areas of expert skill and knowledge in which they felt the strongest and those in which they felt the weakest, and (6) measure how important for their jobs they saw each of these skills to be. A survey instrument was sent to all 127 superintendents and 1303 principals in Alabama public schools.

Based on the data gathered from the 82 superintendents and 550 principals who responded, the researchers found that most administrators were white southern-born males, almost all of whom had advanced professional degrees. The majority of both groups had risen through the ranks in their own districts. More than half of the superintendents planned to retire within five years, while somewhat fewer principals planned to do so. Both principals and superintendents listed community/system politics, frustration and financial inadequacies, better job opportunities elsewhere, and the continued pressure of unfunded state mandates as their primary motivations to leave or retire. Both groups also mentioned on-the-job work experience with other administrators and mentors as the primary influence on their leadership style. Graduate experience and education was ranked fourth by both groups. The study concluded with an analysis of administrator strengths and weaknesses and the implications for the training of administrators in public school settings.

WORK-RELATED BEHAVIORS OF ELECTED AND APPOINTED LOCAL SUPERINTENDENTS OF EDUCATION IN THE STATE OF ALABAMA

Toni Hughes McGriff, Scottsboro City Schools (LA),
and Margaret L. Rice and Harold L. Bishop,
The University of Alabama

The purpose of the study was to examine the perceptions of school board chairs and teacher leaders regarding the work-related behaviors of Alabama school superintendents, and to compare the behaviors of elected and appointed superintendents as to general leadership performance and improvement actions initiated and/or completed by them. A research survey design was used to examine the perceptions of the sample of 160 board chairs and teacher leaders representing both elected and appointed superintendent systems.

Hypotheses were testing using t-test and chi-square procedures. Frequency and percentage techniques were used to answer research questions. Most school systems represented in the study were small (5,000 or fewer students). An overwhelming majority (94.5%) of superintendents were male, and 87% had service of 1-10 years. The majority of superintendents held advanced degrees, but appointed superintendents had a substantially higher number of doctorate degrees. A significant difference existed between the responses of subject relative to the work-related behaviors of elected and appointed superintendents. School board chairs had a more positive perception regarding the work-related behaviors demonstrated by superintendents than did teacher leaders. No significant relationship was found to exist between groups as to general leadership performance of superintendents. Appointed superintendents were more positively perceived than were elected superintendents with regard to 33 specific work-related behaviors. Findings indicated that all Alabama superintendents in the study demonstrated the behaviors, but appointed superintendents were perceived as demonstrating them more frequently than elected superintendents.

RELATIONSHIPS BETWEEN SUPERINTENDENTS' OPINIONS CONCERNING PROFESSIONAL STANDARDS AND GEOGRAPHICAL REGION, AREA POPULATION, AND DISTRICT ENROLLMENT

Charles W. Davidson and William F. Ferguson,
University of Southern Mississippi

Professional standards for teachers, standards for admission to teacher-education programs, and teacher training are of perennial concern to state board of education members, to university faculty and administrators, and to other education decision makers. Among those most affected by the competence or incompetence of teachers, other than the students, are district superintendents. It is they who will receive the brunt of criticism for having hired incompetent teachers. The problem of this study, therefore, was to determine if relationships exist among opinions of public-school district superintendents relative to standards for teachers, admission to teacher-education programs, and teacher education and the independent variables region of the country, area population, and district student enrollment.

A questionnaire was mailed to 250 public-school district superintendents randomly selected from throughout the United States in the winter of 1996-97. One-hundred fifty-four (62.6%) completed questionnaires were returned. Eight of the questions solicited opinions pertaining to professional standards for teachers, standards for admission to teacher-education programs, and teacher education.

Multiple regression analysis was used to analyze the data. There were no significant relationships between superintendents' opinions and region of the country, area population, and/or district enrollment. This would indicate that superintendents' opinions, regardless of region, area population, or district enrollment did not differ on these matters. Descriptive statistics on the superintendents' opinions were presented.

12:00 p.m.-12:50 p.m. EFFICACY (Discussion Session)................................Ridgelake

PRESIDER: Daniel Fasko, Morehead State University

PRESERVICE TEACHERS' EFFICACY BELIEFS IN TAIWAN

Huey-Ling F. Lin and Jeffrey Gorrell, Auburn University

In Taiwan, a teacher is perceived as a central educational figure who is to mediate in translating Chinese social values into the daily school reality. Considering the important roles of teachers, research on efficacy beliefs of preservice teachers helps to understand professional development of teachers in Taiwan.

The purpose of this study was to compare efficacy beliefs of preservice teachers in Taiwan, who were at the beginning of early childhood teacher preparation, with those who were near the end of their preparation programs, and to determine whether there were differences between these two samples of prospective teachers on the efficacy scale. In addition, this study examined the validity of a modified version Gibson and Dembo's 16-item teacher efficacy scale.

The responses of 298 preservice teachers were examined by means of confirmatory factor analysis, using the two factors from Gibson and Dembo. Because that analysis did not yield an adequate fit, exploratory factor analysis, using maximum likelihood extraction and direct oblimin rotation, was performed as a follow-up procedure, resulting in a three-factor structure. Similar analysis was performed separately for each group (beginning and ending), also resulting in three-factor structures, but the factor loadings were different for each group.

Inspection of the results of the exploratory analysis suggested that teacher efficacy in Taiwan is conceptually different from teacher efficacy in the United States. Changes in the factor loadings for students at the beginning and at the about the end of their preparation programs also suggested that preservice teachers' beliefs about their roles as teachers and their potentials for success changed with experience.

EXPANDING NOTIONS OF TEACHER EFFICACY: A STUDY OF PRESERVICE EDUCATION STUDENTS IN BRAZIL

Nancy M. Ares and Jeffrey Gorrell, Auburn
University, and Francis M. Boakari,
Universidade Estadual do Piauç

Teacher efficacy has been shown in numerous studies to be important in explaining differences in teaching effectiveness. It has also been found to change over the course of teacher preparation programs. The purposes of this study were to investigate structure and change in teacher efficacy in preservice teacher education students in two universities in Brazil and to compare that structure and change to that which has been found for teacher education students in the United States.

Teacher education students (N=322) in two universities in Brazil completed an instrument consisting of 18 Likert-type items, six short essay questions, and five items yielding demographic information. Undergraduate students (N=171) and graduate students (N=151) participated; 51% of the respondents were at the beginning of their training, and the remainder were at the conclusion of the preparation program. Results of factor analysis of the 18-item portion of the instrument were reported in this paper.

Preliminary analyses supported findings in teacher development literature that teacher efficacy changes over the course of preservice teacher education, moving from a global nature to one that is more differentiated. Factor analysis of responses of Brazilian students beginning preservice training yielded a single factor, while a multiple-factor solution resulted from analysis of responses from students at the end of their preparation programs. Preliminary analyses of the factor structures found for teacher education students in Brazil did not match those found in the United States. Cultural and contextual influences that may help explain the difference in structures were explored, as were implications for teacher efficacy theory.

TEACHER EFFICACY: NECESSARY TOOL OR SIMPLY A DESCRIPTIVE CHARACTERISTIC? A TWENTY-YEAR LITERATURE REVIEW

E. Jean Newman, University of South Alabama

The purpose of the study was to prepare a narrative summary and critique of the literature related to teacher efficacy, spanning approximately two decades of work. In reviewing over 100 articles (full reference list was provided), it became at once obvious that any sort of statistical meta-analysis is not feasible, because of the breadth of topics covered under the umbrella of teacher efficacy. Therefore, results were succinctly presented by topic, and organized under four general areas: Classroom and Student Variables, School Structure and Administration, Within-and-Between Teacher Variables, and Preservice Teachers.

In addition to the four general categories of research related to teacher efficacy, the review included a survey of the methods used to specifically define and assess teacher efficacy. From scales of measurement such as the Gibson and Dembo (1984) Teacher Efficacy Scale, to defining efficacy by bifurcation into general and personal teacher efficacy as Woolfolk (1981) and others have done, to naturalistic observations and interviews, the review reported several methods of defining, assessing, and attempting to increase teacher efficacy.

To capsule, the most compelling results, as well as the least in number, were those showing a relationship between teacher efficacy and increases in student performance. Most (in number) of the studies, with the most mixed results, came from the area of preservice teachers and attempted to measure changes in efficacy.

Ramifications of results, as well as critique and implications for further study, were included. A complete reference section could be helpful to any who conduct research in the area.

12:00 p.m.-12:50 p.m. **HIGHER EDUCATION (Discussion Session)......................Players**

PRESIDER: Jimmy Carl Harris, Southeastern Louisiana University

ESTABLISHING FACULTY GOVERNANCE AT A COLLEGE OF EDUCATION: A CASE STUDY

Jack Blendinger, Linda Cornelious, and Vincent McGrath,
Mississippi State University

This qualitative case study investigated how faculty governance contributes to professionalism by tracing a decade-long effort to establish a faculty council for a college of education at a major research university. The faculty council emerged as an approach to governance from what was previously a dean's advisory committee, long given relatively low-level tasks such as suggesting faculty members to be given awards or serving in the role of window dressing for accreditation purposes. Shunning its ancestral heritage and capitalizing on the need for shared responsibility in governance, the council moved rapidly to become a viable mechanism for facilitating communication and cooperation between faculty and the administration.

Findings from focused interviews with faculty members involved in establishing the college's fledgling approach to faculty governance and nearly a decade of anecdotal history were shared with those attending the session, along with artifacts such as operational guidelines, selected memoranda, sample agenda and minutes, advisory reports to the dean, and faculty polls. Participants attending the session were invited to share their own experiences with faculty governance and become partners in establishing an action research project tracking experiences in shared governance using the Internet as a communication tool.

If colleges of education are to effectively involve faculty in policy development and decision making, more actual anecdotal cases of faculty councils at work are needed to provide authenticity to the literature base addressing faculty governance. The findings presented in this study will make a meaningful contribution to that literature base.

FACULTY ATTITUDES TOWARD ACADEMIC PROGRAM REVIEW: A LITERATURE REVIEW

Sheila Bassoppo-Moyo, The University of Memphis

The Tennessee Performance Funding Program was initiated as a response to demands by the public and state legislatures for greater accountability in higher education. Academic program review has been judged to be the most popular of the 10 performance funding standards by both the state and higher education institutions. However, some higher education scholars believe that faculty, in general, have negative attitudes toward assessment, and academic program review in particular, while others extol the successes of faculty-driven assessment programs. Almost 20 years after performance funding was initiated, an examination of faculty attitudes toward the process of academic program review for the purpose of making improvements appeared appropriate. Until now there has been no formal assessment of faculty attitudes toward academic program review in the Performance Funding Program in Tennessee state universities.

The literature showed that evaluation of education programs better informed the public of education problems and provided a foundation for sound public policy decisions. Peer review of academic programs was the most favored standard out of the 10 standards comprising the Performance Funding program. Faculty and administrators had differing attitudes regarding the academic program review process. A major problem perceived by faculty was the level of administrative commitment toward the implementation of the review's recommendations.

Implications of the literature review were that different attitudes among faculty may have affected the review process, the final report, and the implementation of the review findings.

DEFINING INSTITUTIONAL EFFECTIVENESS FOR A METROPOLITAN UNIVERSITY

Kathy Kramer Franklin, Kathy J. Boggs, Nicola A. Conners, Cindy Bagwell Crum,
Piyaporn Nawarat, Carmen T. Ramirez, and Kathy C. Trawick,
University of Arkansas at Little Rock

The distinguishing characteristic of the metropolitan university mission is the symbiotic relationship between the university and the surrounding metropolis. Because administrators are the resource allocators and information gatekeepers for the university, the criteria they use to evaluate institutional effectiveness influences their motivation to design and implement strategic plans that are congruent with this metropolitan mission.

The purpose of this qualitative study was to: (1) define the criteria used by metropolitan university administrators in evaluating institutional effectiveness and (2) ascertain the congruency between these evaluative criteria and characteristics of the metropolitan mission. Four focus group sessions were conducted with administrators from one southern, metropolitan university. The focus group participants were purposively selected from each of the following position levels: (1) vice chancellors, (2) associate and assistant vice chancellors, (3) college deans, and (4) department chairs. A personal interview was conducted with the university chancellor. The focus group guide was replicated from research conducted by Franklin (1996) on institutional effectiveness with a regional, comprehensive university. The primary researcher for this study served as the moderator for each focus group session. Along with the moderator, a scribe was present to ensure moderator objectivity. All focus group sessions were audio-recorded to ease the data analysis. The approximate length of each session was one hour.

A content analysis procedure employing Ethnograph v4.0 software was used for data analysis. With this procedure, the researchers: (1) reduced the focus group data into coding categories, (2) combined the coding categories into emerging attitude patterns on institutional effectiveness, (3) wrote informal memo statements summarizing each of the pattern codes, (4) converted the memo statements into formal proposition statements of significant attitude trends, and (5) used the proposition statements to determine the administrator evaluative criteria. Finally, these evaluative criteria were compared to the components of the metropolitan mission to determine congruency.

12:00 p.m.-12:50 p.m. **ART EDUCATION (Discussion Session)..........................Missouri**

PRESIDER: Jan Downing, University of Central Arkansas

THE EFFECTS OF CREATIVE DANCE MOVEMENT TAUGHT IN A HOLISTIC INTEGRATED APPROACH VERSUS CREATIVE DANCE MOVEMENT TAUGHT IN ISOLATION

Mary Anne Sowers and Patrick Kariuki, Milligan College

The purpose of this study was to determine if there were any significant difference in performance between students taught creative dance movement in a holistic integrated approach versus teaching creative dance movement in isolation, on the Tennessee Comprehensive Assessment Program(TCAP), and on English and math grades. The sample for this study was taken from two third-grade classes of approximately 20 students per class. For a six-week period prior to TCAP testing, one class was taught creative dance movement using a holistic approach, and the other class was taught creative dance movement in isolation.

The data for this study were collected from standardized TCAP test scores and end-of-the-six-week grades in English and math. Data were analyzed using measures of central tendency and measures of dispersion, t-tests for independent means, and Pearson product moment correlations.

Results indicated that there was a significant difference in TCAP scores between students who were taught creative dance movement in a holistic integrated approach versus those who were taught creative dance movement in isolation. There was no significant relationship found between the two groups in their English and math grades.

ASSESSMENT: YOUNG CHILDREN AND THE VISUAL ARTS

Judy Ann Hale and Patricia K. Lowry,
Jacksonville State University

The topic was the assessment of young children's reading abilities through the use of artwork. According to Lowenfeld and Brittain (1987), if the objects in a child's drawing are unrelated to each other (a characteristic of the preschematic stage of art development), then that child does not have the ability to relate letters to each other and is not ready to learn to read. Adults can encourage the development of cognition and literacy by providing children with a variety of drawing materials. Cognition and literacy can be encouraged by helping children to become more aware of their environment and their relationship to that environment. This developing awareness of their relationship to the environment is reflected in the children's drawing. This display was significant in that it demonstrated how the artwork of children could act as a compound to unite cognition and literacy.

This study consisted of 17 transitional/first-grade children. A portfolio was developed for each child and consisted of artwork and documentation of reading abilities. The stage of art development and the cognitive level of each child were determined.

1:00 p.m.-1:50 p.m. **MINORITY RECRUITMENT
(Symposium Session)..Arkansas**

THE NSF MENTOR PROGRAM FOR MINORITY SECONDARY MATHEMATICS AND SCIENCE TEACHERS

ORGANIZER: J. Reid Jones, Delta State University

Overview of the Mississippi Alliance for Minority Participation (MAMP) and MENTOR

J. Reid Jones, Delta State University

The MAMP program has successfully doubled the number of minority students receiving the baccalaureate mathematics and science (M&S) degrees in Mississippi during the past six years. During this past year, the MENTOR program has been added as a component of the MAMP program. The goals of MENTOR were to: (1) dramatically increase the number of minority students receiving degrees in M&S teacher education; (2) establish a statewide network of resource sharing among science, mathematics, and education faculty with undergraduates, public school teachers, and high school students; and (3) establish teams among these groups to promote research into M&S education.

Statistical Profile of Rural Science and Mathematics Instruction in Public Schools

John G. Thornell, Delta State University

A Mississippi database for educational statistics demonstrated that 91% of all public school districts served predominantly rural populations. Additionally, over 50% of all students enrolled in public schools were African Americans. Factors that impacted secondary M&S instruction were: (1) low SES, (2) small district enrollment and resources, and (3) small numbers of advanced degrees in M&S. However, some districts were found to excel despite these issues. A statistical profile of those districts was presented.

Learning Plus: Software Preparation for General Skill Building and the PPST

Carolyn Rackley, Educational Testing Service; David Williams, Barber-Scotia College; and Hines Cronin, Delta State University

Teacher education programs require various entry-level examinations of academic skills. During the past year, Mississippi has changed to using the Pre-Professional Skills Test (PPST), published by the Educational Testing Service (ETS). Minority and rural students have traditionally been at a disadvantage on these tests. ETS has developed a general academic skill building test that is diagnostic and keyed to the PPST. The software was demonstrated. Results demonstrating the success of Learning Plus software were presented from a long-term user and from the last year in the MENTOR Program.

Networking at All Levels

Carol L. Jones, Delta State University

The MENTOR program has established an e-mail network and a statewide newsletter (The Networker) to build the infrastructure necessary for long-term success. Materials, e-mail directories, and ideas were shared with the audience. Ways to improve MENTOR and similar teacher education efforts were discussed, providing concepts from five other AMP teacher preparation programs. Liaison with these other NSF-sponsored programs was established.

1:00 p.m.-1:50 p.m. **GENDER ISSUES (Discussion Session)..........................Ridgelake**

PRESIDER: Stella Brown Wear, Delta State University

GENDER AND GRADE DIFFERENCES IN ELEMENTARY STUDENTS' PERCEPTIONS OF STUDENTS' PERCEPTIONS OF CONFLICT/ VIOLENCE AND INTERVENTION STRATEGIES

Yvetta George and Joel Keiter, Nova Southeastern University;
Glennelle Halpin and Gerald Halpin, Auburn University;
and Donna Dagnese, Florida Atlantic University

Violence is a leading cause of death for Americans between ages 15 and 24. Also, during the past 10 years, acts of violence in schools have escalated. Researchers are attempting to reverse this trend toward violent behavior among young people by developing conflict resolution programs as well as by examining related variables that may contribute to a propensity toward violence. The purpose of this study was to determine if there were significant gender and grade differences in perceptions of conflict, violence, and intervention strategies in a sample of elementary students.

A 21-item questionnaire assessing elementary students' perceptions of conflict, violence, and ways to resolve conflicts was administered to 51 third-grade students, 75 fourth-grade students, and 95 fifth-grade students from nine schools in a large metropolitan school district located in the Southeast. Chi-square analyses revealed a number of significant gender differences but few grade-level differences. Boys were more likely to resort to violence while girls were more prone to listen and to try to resolve the conflict. An understanding of these gender differences by educators is crucial so that they can customize their conflict resolution interventions to fit the perceptions and to meet the needs of both boys and girls.

MALE ELEMENTARY SCHOOL TEACHERS' RATINGS OF JOB SATISFACTIONS BY YEARS OF TEACHING EXPERIENCE

Beverly Klecker, Eastern Kentucky University

The purpose of this study was to add to a sparse body of research on male elementary school teachers. Recent studies have reported that male elementary preservice teachers are unique because their backgrounds and perceptions about teaching differ in many ways from female preservice teachers. This study extended the research to male elementary school teachers across six "years of teaching experience "categories ranging from "five or fewer" to "26 and more." Measures of job satisfaction were obtained from a sample of 1,874 (85% female, 15% male) teachers working in 76 elementary schools. Seven aspects of job satisfaction were measured with the National Follow-up Survey of Teacher Education Graduates Job Satisfaction Subscale. Measured were satisfaction with: (1) salary, (2) opportunities for advancement, (3) challenge of the job, (4) autonomy, (5) working conditions, (6) interaction with colleagues, and (7) interaction with students. Two-way ANOVAs by gender and years of teaching experience were used to explore differences in responses. Least square means follow-up tests were used for statistically significant omnibus Fs. There were no statistically significant ($p<.01$) interactions on any of ANOVAs. Statistically significant differences ($p<.01$) with effect size greater than .01 were found by gender on ratings of satisfaction with opportunities for advancement, challenge of the job, interaction with colleagues, interaction with students, and total scale score. Female elementary teachers rated their job satisfaction higher on each of these aspects. Only one statistically significant difference ($p<.01$) with an effect size greater than .01 was found by "years of teaching

experience." Teachers with five or fewer years of experience rated their satisfaction with "interaction with colleagues" higher than did teachers in other categories. There were no statistically significant ($p<.01$) differences in ratings of satisfaction with salary, degree of autonomy, or overall working conditions.

GENDER DIFFERENCES AND SIMILARITIES ON THE COGNITIVE ABILITIES TEST BATTERIES

Edward C. Drahozal, The Riverside Publishing Company

Gender fairness or bias in tests has been the focus of many papers and research studies since the sixties. The popular press would lead one to believe that all quantitative/mathematical or nonverbal/spatial tests that measure achievement or ability favor males. Although considerable data on achievement tests and college-entrance tests have been published, little information about multi-factor ability test batteries is available.

Since the publication of the Research Handbook for the Cognitive Abilities Test (CogAT), a number of people have inquired about possible bias against females on the nonverbal battery of the test. A table in the handbook indicated that, based on an analysis of the national standardization test data, nearly 1% of the nonverbal test items were found to potentially favor males but less than .3% of the items possibly favored females. The data in the table are based on the Mantel-Haenszel statistic using the ETS classification rules of classifying based on the chi-square statistic and the delta value. The N's ranged from 6,000+ to 12,000+ per grade.

Because the CogAT is a multi-level test with level-to-level (grade-to-grade) item overlap, it was possible to analyze data for successive grade groups to determine if items that favored one group on one level (grade) favored the same group or the other group or showed no favoritism on adjacent levels. This information also answers questions about the consistency of item classification using the same bias statistic with very similar groups.

The data were also analyzed by grade by score level, a type of analysis that was strongly recommended by the Committee on Bias in Measurement in the early eighties. Although some mean raw scores for some groups were nearly identical, some differences at the 10th, 50th, and 90th percentiles were noted.

1:00 p.m.-1:50 p.m. **STUDENT MOTIVATION**
(Discussion Session).. Players

PRESIDER: Anisa Al-Khatab, Eastern Kentucky University

DIFFERENTIAL APPLICATION OF MOTIVATION AND LEARNING STRATEGIES

Susanne MacGuire, Glennelle Halpin, and Gerald Halpin, Auburn University

One of the important questions considered when addressing student achievement is the impact of the student's level of motivation and use of learning strategies, but an important corollary is the concern over the consistent application of these variables. Is the student's level of motivation more of a personal characteristic that is rather constant across courses, or does it vary significantly depending on the particular course? Does the student apply learning strategies in a consistent manner to master the material from different courses?

The purpose of this study was to examine variations in student motivation and learning strategies across two college courses. Basically, the research question was this: Are student motivation and learning strategies course specific or consistent from course to course? To address this question, the Motivated Strategies for Learning Questionnaire (MSLQ) was administered to 45 college freshmen enrolled in both a calculus class and an engineering class. This instrument assesses aspects of motivation such as intrinsic and extrinsic goal orientation, task value, and test anxiety as well as aspects of learning strategies such as rehearsal, elaboration, self-regulation, and management of various resources.

Comparison of mean levels of motivation and use of learning strategies indicated that on 9 of the 15 factors assessed by the MSLQ there was a significant differential group response dependent on the class ($p < .05$). Aspects of motivation which differed included intrinsic goal orientation, control of learning beliefs, and task value while the pertinent aspects of learning strategies included critical thinking, regulation of effort, peer learning, rehearsal, metacognitive self-regulation, and time and study environment. These results supported the conclusion that motivation and learning strategies were indeed course specific.

EFFECTS OF SUPPLEMENTAL INSTRUCTION ON UNDERGRADUATE STUDENT ACADEMIC ACHIEVEMENT

Jeremy Fisher, Edward Martinelli, and Kathryn Jarvis,
Auburn University

The purpose of this study was to determine the effects of Supplemental Instruction (SI) on the Motivated Strategies for Learning Questionnaire (MSLQ). Supplemental Instruction is an academic support program that targets traditionally difficult academic courses and offers regularly scheduled, out-of-class, peer-facilitated, collaborative review sessions to all students enrolled in classes where SI is offered. The MSLQ is a self-reported instrument that measures motivation and learning strategies.

One hundred and seventy-five undergraduate students enrolled in a core, freshman-level history course participated in the study. The experimental group included 80 students who participated in Supplemental Instruction and 95 students who did not participate. The following questions were addressed: (1) Is there a relationship between specific items on the MSLQ and participation in SI? and (2) Is there a relationship between final course grades and participation in SI?

Univariate and multivariate statistical procedures were conducted for the experimental and comparison groups at the .05 level. Based on the results, no differences were found.

RELATIONSHIP BETWEEN ATTENDANCE AND ACADEMIC ACHIEVEMENT IN HIGH SCHOOL FRESHMAN CLASS

Anne K. White and Patrick Kariuki,
Milligan College

The purpose of this study was to determine the relationship between regular attendance and academic achievement. For the study, 44 freshman students were randomly chosen: 22 females and 22 males. The students were observed for nine consecutive weeks. Their attendance records were carefully kept by the researcher and included absences, tardies, and school-related events. During this nine-week period, the students' grades were also carefully monitored by the researcher, and any abnormality was noted for the record. The students' grades consisted of test grades, quiz grades, daily work grades, and a notebook grade; all of these were averaged together for a final average.

Data were analyzed using measures of central tendency, t-test for independent sample means, and Pearson product moment correlation.

The results of the research determined no significant difference in overall attendance and academic achievement. However, significant difference was found on students who missed zero days and those who missed ten or more days. There was a significant relationship found between test scores and final average, quiz scores, daily scores, and notebook.

1:00 p.m.-1:50 p.m. **EDUCATIONAL REFORM (Discussion Session)................ Missouri**

PRESIDER: Robert R. Horne, Jr., Auburn University

EDUCATION AS MALPRACTICE

Charles M. Achilles, Eastern Michigan University,
and B. A. Nye, Tennessee State University

This position paper drew its examples from Project STAR and related studies. STAR is education's longest (1985-97) and largest (over 11,000 students) true experiment about achievement and other student outcomes.

Position: Much education at best is impostership; at worst, it is malpractice.

Key Questions: If education is a profession, what constitutes education malpractice? If a person claims to be a professional and (a) does not know the field's basic knowledge base (KB), then . . . ?, or (b) knows but does not use the KB, then . . . ?

Assertions: Professionals deliver expertise built from a KB that derives from research, theory, and exemplary practice. Most professional codes of ethics include the concept, "At least don't harm the client." Non-use of class-size results constitutes malpractice, given their extensive benefits.

Examples: Small classes (about 1:15) in K-3 benefit student achievement and development, improve teacher morale, provide differential and positive benefits for "hard-to-reach" students. In small classes, grade retention (usually harmful to the client) is reduced; teachers accurately identify students' special needs so they may be remedied. Small classes improve student participation, engagement, and identification with school and reduce student indicsipline and dropout.

Not only STAR results, but also results of other studies and projects agree on the statistical significance (at least .05) and educational importance (.3 ES or more) of the "small-class effect." When what to do is known, the professional challenge is how to do it. This paper generated discussion on the topic that malpractice in education is NOT using results of powerful research such as STAR.

IMPLEMENTING ERA THREE EXPECTANCY - "ALL CHILDREN CAN LEARN AND ALL CHILDREN WILL LEARN": WHAT SHOULD ADMINISTRATORS BE ABOUT?

Jack Klotz, University of Southern Mississippi

Learning expectancy has evolved through three main eras since 1837. In the first (1837-1909), educators taught basic literacy skills and expected a little learning from many students. Thus, students learned the three r's and little more. In the second era (1910-1975), homogeneous grouping evolved. Students were expected to learn proportionately to their scores on various norm-referenced tests. Thus, high scorers were expected to learn more than low scorers. Student failure was accepted, in some cases even expected, given student performance on tests.

The current era began in 1976 and holds that "All children can learn and all children will learn. "Unfortunately, this expectation, while well intended, has not been fully implemented throughout the American educational system. Unlike the other eras, this level of expectancy holds educators, particularly teachers and administrators, responsible for helping all students learn. Research findings concerned with teaching practices and how they impact on learning have revealed that teachers can help students learn, even those labeled at-risk, assuming teachers possess certain instructional skills and receive support from their administrators.

This presentation addressed the following: (1) What are the expectations associated with this expectancy for teacher and administrator behavior? (2) What instructional strategies should teachers be capable of employing in their classrooms? (3) What instructional strategies should administrators be knowledgeable of, capable of recognizing as present, and committed to ensuring as being in place within the educational learning environment?

1:00 p.m.-1:50 p.m. **AT-RISK STUDENTS (Discussion Session)................ Parlor 104/106**

PRESIDER: Jacquelyn P. Robinson, Auburn University

EVALUATION OF AN INTERVENTION PROGRAM TARGETING AT-RISK STUDENTS

C. Jeffery Knighton and Edith Miller, Auburn University

The purpose of this evaluation was to design and implement a data compilation procedure and then to conduct statistical analyses of relevant data to determine the effectiveness of the At-Risk Student Program for an Alabama school system. The goal of the system's At-Risk Program is to enhance participating students' academic achievement and increase the probability of their staying in school. Each individual school had its own body of data that documented the identification of the student's at-risk situation. Dependent variables were academic achievement as measured by the Stanford Achievement Test, Edition Nine, and drop-out information.

After meeting with key school personnel, a refined format for data collection was prepared, including directions, to make data collection consistent for all schools. In addition, directions were provided for putting data into an ASCI file.

Data were organized and reported by each school for three different samples of students: (1) students currently being served by the At-Risk Program, (2) students identified as being at-risk but not being served, and (3) a sample of students from the general population of each participating school. After all data had been gathered for each sample, statistical analyses were conducted, and a report was provided that describes the effectiveness of the At-Risk Program. Also, suggestions, based on current research findings as well as the program evaluation results, were made for improving the program.

THE AT-RISK STUDENT: DEFINING VARIABLES AND NEEDED RESPONSES

Edith Miller, Wendy K. Knighton, and C. Jeffrey Knighton, Auburn University

For at least the last 20 years, students who were described at risk of failure in schools, dropping out of school, or otherwise being failed by schools have received a great deal of attention. Special programs with special funding have appeared in school after school with varying degrees of success and widely varying takes on who these at-risk students are and what kinds of services they need. One purpose of this position paper was to review the existing literature regarding the identification of at-risk students and programs designed to serve these students. The second purpose was to examine the findings in terms of developmental variables as well as educational issues that not only help illuminate the "at-risk" condition but also point to positive suggestions for helpful interventions.

Consistent at-risk themes resonate throughout the literature: cyclical poverty, low socioeconomic status, minority status, school failure including retention, frequent tardies and spotty school attendance, limited problem solving, conflict resolution skills, the attractions of outside interests, health problems, and problems with teachers and administrators. Inadequate or low self concept and/or self esteem permeate the discussion of at-risk status.

The variables that identify students at risk, the variables that eventually lead to their leaving school, and the ways in which schools both serve and fail these students do not exist in a vacuum. These at-risk students, along with all other students, are in periods of intense developmental crises during these school years. The goal of this paper was to analyze and interpret the dynamic interaction between factors of risk and developmental crises in ways that can lead to successful and perhaps more on-point interventions.

AT RISK YOUTH: THEORY, PRACTICE AND REFORM

Robert F. Kronick, The University of Tennessee

This proposal was designed to look at the extant literature and present information from a three-year research project that culminated in a book entitled *At-Risk Youth: Theory, Practice and Reform* published by Garland Press, New York and London. The major areas that this paper discussed were at-risk youth, the state of the art; social, political and health aspects of at-risk youth; qualitative research as a tool in studying at-risk youth; multiculturalism and at-risk youth; and the role of higher education in preparing teachers and human service workers to deal with at-risk youth.

How many at-risk youth are there really? How is this figure determined? Also reviewed was the role of alcohol and drugs as well as political power issues in at-risk studies, the role of television and its impact on at-risk youth, and the importance of including often times ignored groups such as the American Indian and Appalachians. Finally what is the role of colleges of education in preparing professionals who will work with people in this area?

1:00 p.m.-1:50 p.m. PARENT INVOLVEMENT (Display Session)........... Directors Room

PREPARING STUDENT TEACHERS TO COMMUNICATE WITH FAMILIES: A PORTFOLIO APPROACH

Linda T. Jones and Jack Blendinger,
Mississippi State University

This poster presentation focused on the role that portfolios can serve in preparing future elementary school teachers to work with families. New national teacher education standards calling for competency in working with families and essential research findings on the benefits of parent involvement were also highlighted in the presentation.

Preparing future teachers to work with families is seen as a continuum that moves from understanding the importance of involving families in their children's education to developing skills necessary to put parent involvement into practice. As the prospective teacher travels the continuum, she/he moves from awareness to being an active participant in the process during the student teaching experience. To demonstrate their newly acquired knowledge, student teachers construct portfolios containing parent involvement activities they have implemented (e.g., newsletters, success messages, back-to-school night) and reading projects that require parent participation in the home.

Evaluations completed by student teachers and assessment of the portfolios over a five-year period yielded positive results. Sample portfolios were displayed so that participants could see how parent involvement activities were incorporated into the student teaching experience.

IMPACT OF SCHOOL-RELATED, COMMUNITY-BASED, AND PARENTAL-INVOLVEMENT ACTIVITIES ON ACHIEVEMENT OF AT-RISK YOUTH IN THE HIGH SCHOOL SETTING

Barbara N. Young, Middle Tennessee State University; Marilyn E. Whitley,
Metro-Nashville (TN) Public Schools; and Carol Helton,
Tennessee State University

This research was conducted over the course of last year's school term at a local high school. It addressed the question about how important extra-curricular involvement was to at-risk youth and to what extent this involvement had potential to influence performance in the academic realm. Involvement in school-related activities, community-based activity involvement, and activities within the home setting that involved parents with their children were investigated. Interviews and other qualitative data sources were used. Findings were shared and discussion about school's responsibility for compensation for lack of parental support through extra-curricular "curriculum" was addressed. Also, questions relating to whether activities can compensate for deficiencies in the social/emotional areas as an alternative to gang involvement in each area were correlated with variables such as achievement, race, age, and self-esteem perceptions.

2:00 p.m.-3:50 p.m. **PUBLICATIONS (Training Session - 2 hours)................... Louisiana**

WRITING FOR PUBLICATION

John R. Petry, The University of Memphis,
and Charles M. Achilles,Eastern
Michigan University

Training centered around opportunities and problems associated with writing and publishing articles and manuscripts. Topics included were sources of ideas for research and writing, guides for effective writing, proofing and editing a manuscript, publication sources, preparing a manuscript, methods of submitting manuscripts, criteria for evaluating manuscripts, and ethics in authorship and publishing. Other topics addressed included elements of style: elementary roles of usage, principles of composition and form, an approach to style, and faults in scholarly writing. The use of the computer in writing and editing was explored.

Objectives of the session were to increase the awareness of attendees of opportunities to publish, raise standards for writing quality manuscripts, and establish minimum guidelines for professional growth. The use of technology was of primary value.

Activities included a diagnosis of the basic writing skills of attendees, analysis of articles ready for submission to publications, and administration of a predictive measure for publication success. A number of sources for publishing were presented and discussed. Publication sources were identified that give the manuscript submitters a higher chance of achieving success for acceptance. Participants' manuscripts were evaluated for their content, style, impact on the reader, value to the scholarly community, and importance as a contribution to literature.

2:00 p.m.-2:50 p.m. **SCHOOL IMPROVEMENT (Symposium Session)..............Arkansas**

ORGANIZER: Neil G. Amos, Mississippi State University

DO YOU SEE WHAT I SEE? A LOOKING GLASS APPROACH TO BUILDING CAPACITY IN EDUCATION PROFESSIONALS

Case Study: An Overview of PREPS- Model and Process
Mike Walters, Mississippi State University

Data Collection, Analysis, and Interpretation
Cynthia Ward, Mississippi State University

Observation Strategies for Program Improvement
Kay Brocato, Mississippi State University

Summary: Questions and Answers
Neil G. Amos, Mississippi State University

The Center for Educational Partnerships has developed a successful model for increasing capacity in schools, school professionals, and school communities. By forming a diverse grouping of education professionals, this team seeks to assist districts in realizing, exploring, and meeting needs that are particular to individual districts. This "Looking Glass Approach" has become a set of flexible steps that can be shared as a technique for spotlighting promising practice and zeroing in on areas of challenge for school districts. This presentation discussed this successful model of university and statewide school district partnerships for mutual development.

Using some common techniques, but not prescribing a rigid structure for this analysis has proven to be the strength in this type of program analysis. Areas of challenge are unique to each district; therefore, the process used for analysis must be as unique as the district itself. Observing the entirety of school buildings and grounds (classrooms, hallways, libraries, counseling facilities, gymnasiums, cafeterias, playing fields, and so forth., has become the initial step in this process. The next essential piece involves open and honest communication. "Straight talk" sessions are organized with individuals from every level of the school community. Parents, teachers, students, school administrators, and district level administrators share candid concerns for their school districts in a risk-free environment. Additional pieces of this process involve observation of instruction. The value of these observations lies in the fact that no judgment is attached to the actions described. The examples reported attempted to provide some specific and impartial insight into district actions as seen by individuals not connected to the district. Most appropriately used, these descriptions provided the school community with a more objective picture of district functionings.

Diversity among observation team members has also proven to be an enormous asset. Teams are of multicultural, multigenerational, cross gender, and varied professional experience. One factor shared by team members makes the evaluation results authentic and valuable. Educators form this capacity building team. Each individual is familiar with schools, school operations, and school cultures. The nuances so peculiar to these institutions called schools are understood--are even part of team members' personal experiences. Outcomes of this school improvement process are evident through newly established collaboration among teacher educators at the university, plus partnerships between team members and practitioners in local school districts.

The ever-increasing challenges of educational institutions, kindergarten through higher education, have prompted greater interest in the creation of partnerships focusing on improving schools. The age of accountability and the impact of technology on teaching and learning are two examples of significant influences on educators that have created an environment for dialogue among key individuals and groups who are closely connected to education. Linking the world of practice to the vast resources of higher education and the private sector through a center whose primary goal is to build capacity of teachers and administrators in local school districts throughout the state is yielding early high return in a state with unique challenges.

2:00 p.m.-2:50 p.m. **ATTITUDES (Discussion Session)................................Ridgelake**

PRESIDER: Dianne Lawler-Prince, Arkansas State University

ADOLESCENTS' AND EDUCATORS' PERCEPTIONS OF VALUES: IMPLICATIONS FOR PUBLIC EDUCATION

Deborah Grubb, Jeanne Osborne, and Daniel Fasko, Jr.,
Morehead State University

The purpose of this study was to determine if there were common values, such as honesty, civility, equality, freedom, and responsibility, on which teachers and students agreed. A sample of high school students and a sample of teachers were surveyed to determine their views to Phi Delta Kappa's survey, "What Do You Really Believe?" Teachers were also surveyed to predict how they thought students would respond to the survey. The teachers surveyed reported that they thought teens would make more valueless or negative statements than the teens actually did. The students reached a consensus on 10 statements that inferred positive core values and consensus on nine statements indicating lack of positive core values. The educators predicted students would have half as many positive value beliefs and twice as many beliefs indicating a lack of positive core values. Implications for public school practice in the acquisition of moral reasoning were discussed.

LONGITUDINAL STUDY OF PRESERVICE TEACHER ATTITUDES TOWARD AN ELEMENTARY EDUCATION PROGRAM

Ava F. Pugh and Fred H. Groves,
Northeast Louisianas University

The purpose of the study was to ascertain the effectiveness of the elementary professional block courses at Northeast Louisiana University. Over a period of 18 semesters, 913 elementary education majors were surveyed with a questionnaire. The students completed the questionnaire anonymously after they had received their final grades for each of the methods courses. The questionnaire consisted of 31 elements with Likert-scale choices that targeted attitudes towards the teaching of science, math, language arts, and children's literature. It also addressed the generic components of the professional block, which consisted of writing lesson plans, formulating units, and practicing classroom management techniques. Demographics were collected for some of the later semesters and included the major, sex, block section, ethnic group, and age.

The overall mean for all questions for all 913 students was 4.30 (Sd=.38) on a scale of 1 to 5, with a high of 4.76 and a low of 3.84. Cronbach's Alpha for internal validity was .90. The 4.76 score involved the preservice teachers' sense of good rapport with their classroom students. Concerning the content methods areas, the preservice teachers felt well prepared in science but less well prepared in mathematics.

A COMPARISON OF CHANGES IN ATTITUDES TOWARD SCIENCE IN CHEMISTRY AND ELEMENTARY SCIENCE METHODS COURSES

Clifford A. Hofwolt, Vanderbilt University

This study investigated whether students' attitudes toward science were changed as a result of experiences in a science course and/or a methods course particularly when protype interactive CD-ROM materials had been developed to create more interest and learning opportunities. Prior to taking an elementary science methods students may or may not have taken a fundamentals of chemistry course. Of interest were changes in attitudes about science in prospective elementary science teachers inasmuch as research has indicated that most elementary teachers have low attitudes and anxiety about teaching science in the elementary school.

Students in chemistry and elementary science classes were administered the survey instrument, What I Think About Science, at the beginning of the semester and again at the end of the semester. Data were collected over a two-year period. A t-test was used to determine if differences between beginning and ending attitudes existed for both courses.

Analysis of the data indicated that students attitudes about science and chemistry in particular did not change in chemistry students. They started and ended with a slightly positive attitude about science and chemistry. Elementary science methods students' attitudes about science and chemistry, in particular, showed a significant change in a positive direction. Elementary science methods students also showed positive gains in attitudes about biology and physics. Positive gains among elementary science methods students may have been due to the hands-on nature of the course, the small class size, and the fact that students found science interesting to learn and teach.

2:00 p.m.-2:50 p.m. **EXCEPTIONAL EDUCATION**
(Discussion Session)..Players

PRESIDER: E. Joan Looby, Mississippi State University

PRESERVICE TEACHER EDUCATION MAJORS' KNOWLEDGE AND QUESTIONS CONCERNING NINE DISABILITIES AND IMPLICATIONS FOR TEACHER EDUCATION PROGRAMS

Joan C. Harlan and Sidney Rowland,
The University of Mississippi

The purpose of the study was to determine what preservice teacher education majors knew about nine topics typically considered to be disabilities in a learning environment: learning disabilities, mental retardation, emotional disabilities, speech/language disorders, health impairments, autism, attention deficit/hyperactivity disorders, visual impairments, and hearing impairments. More specifically, the students were surveyed about what each of the nine descriptive labels meant, what they would do with the information when/if teaching such learners, and what questions they would have about a student with such a disability. Over 100 elementary and special education majors were surveyed in the spring of 1997 using a researcher-prepared nine-item, short essay instrument. The sample was primarily white females ranging in age from 18 - 45. Respondents' replies were analyzed and then categorized by the researchers.

Results indicated that the respondents generally knew that selected accommodations and special learning plans were needed for one or more of the nine disability areas that were the subject of inquiry, but they were generally unable to articulate specifics. Respondents expressed concern about how to teach such students, and they were unanimously concerned about the likelihood of resultant disciplinary and management problems. Results reinforced the necessity of educating elementary education as well as special education majors in methodological and management strategies for all learners and various curricula. Instructional implications of interest to teacher educators program developers and inservice trainers were presented.

A COMPARISON OF ATTITUDES AND BELIEFS TOWARD INCLUSIVE SCHOOLING OF UNDERGRADUATE AND GRADUATE SPECIAL EDUCATION STUDENTS

Kathleen Atkins, David L. Naylor, and James C. Mainord,
University of Central Arkansas, and James E. Whorton,
University of Southern Mississippi

The practice of inclusion, providing a normalized education experience for all children with disabilities, remains a source of controversy among professionals. Literature indicates that a genuine commitment to inclusion requires the systems change approach in which teacher training, school district policies and practices, professional roles and all stakeholders act to create an environment that fosters inclusion for everyone. Eliminating the traditional exclusive philosophy toward persons with disabilities poses several challenges to the educational system. This study sought to investigate the specific challenge of individual beliefs and attitudes toward inclusive schooling, the most fundamental and essential element to successful inclusion practices.

Undergraduate and graduate students enrolled in the Special Education teacher training program completed an Inclusion Belief and Attitude Inventory developed by the primary investigators. The 20-item Belief and Attitude Inventory was designed on a Likert-type format and administered by the investigators of the study. A comparison of inventory responses of the two groups of students was made. Statistical analyses were used to determine if significant differences existed in the attitudes and beliefs of the two groups.

The results were analyzed utilizing SPSS-X and were presented in graphic and narrative formats. The results of the study were discussed relative to the implications of attitudes, beliefs, and knowledge for successful inclusion practices.

CMT OR SEAMINT: A DEVELOPMENTAL ANALYSIS OF THE SPELLING ERROR PATTERNS OF STUDENTS WITH LANGUAGE DISABILITIES

Angela Lewis, Darryl Stevens, David Martin and
Anne Hamilton, The University of Montevallo

The purpose of this study was to analyze the spelling error patterns of students with language learning disabilities (LLD). Fifty-one students with LLD were asked to write the following seven words: punishment, cement, motion, ocean, vacation, tomato, and karate. Student spelling samples were analyzed based on the writing categories established by Ferreiro and Teberosky (1979/1982). A content analysis of the spelling samples revealed that 44 of the 51 students were categorized at the alphabetic level. Spelling samples of these 44 students were further examined for spelling error patterns. The work of Bean and Buffler (1987) and Buchanan (1989) provided the framework for the analysis of spelling errors.

Teachers of second- and third-grade students labeled language learning disabled (LLD) also participated in this study. This research described the practices and beliefs of five teachers of students with LLD along with an analysis of the spelling error patterns and strategies used by their students.

The methods used for data collection in this study included (1) interviews with students, (2) collection of individual spelling samples, and (3) teacher interviews. Each writing sample was analyzed by four researchers. At least four of the eight words had to meet the criteria for a particular level to qualify the writing to be categorized at the alphabetic level.

Teachers' responses were recorded during the interviews on a survey containing interview questions. Data collection was managed using the cut-up-put-in-folders approach described in Bogdan and Biklen (1992). Responses were analyzed for similar patterns and themes.

Students used various strategies at the alphabetic level. Predominant strategies used by students with LLD included spelling words the way they sound, the way they are articulated, and the way they look.

2:00 p.m.-2:50 p.m. **INSTRUCTIONAL PRACTICES**
(Discussion Session)..Missouri

PRESIDER: Kenneth Clawson, Eastern Kentucky University

EFFECTS OF AN ORAL ADVANCE ORGANIZER ON IMMEDIATE AND DELAYED RETENTION

Grace Kirkman, Alabama Cooperative
Extension Service, and Edward L.
Shaw, Jr., University
of South Alabama

The purpose of this study was to examine the effects of a comparative advance organizer in an oral format on learners' immediate and delayed retention of foods and nutrition subject matter when controlling for learners' prior knowledge level; more specifically, to determine whether students retained more foods and nutrition material when it is introduced with an advance organizer than when it is not. Another area of interest was to investigate whether paraphrasing the comparative advance organizer prior to receiving oral instruction would be an effective strategy to help learners when encoding the advance organizer and the subsequent material. Thirty-two high school students enrolled in two food science classes at Fairhope High School, Fairhope, Alabama, participated as the sample for the study.

Subjects were initially tested for foods and nutrition prior knowledge using a Prior Knowledge Questionnaire. After testing, subjects were randomly assigned to one of three treatment conditions: treatment one (oral comparative advance organizer), treatment two (oral comparative advance organizer plus paraphrasing), and treatment three (no oral comparative advance organizer).

An analysis of covariance was used with prior knowledge level as the covariate to determine whether there were significant differences between treatment groups after controlling for learners' existing knowledge of foods and nutrition. The findings revealed that no single treatment condition was more effective in facilitating immediate and delayed retention of text. Additionally, subjects paraphrasing the comparative advance organizer prior to receiving the oral instruction failed to demonstrate a positive influence on subjects' recall of foods and nutrition material.

COMPARISONS OF STUDENTS' EVALUATIONS OF SOCIAL STUDIES METHODS INSTRUCTION ACCORDING TO PASSIVE AND ACTIVE INSTRUCTIONAL APPROACHES

John Byer, University of Southern Mississippi

This research addressed the problem of how to statistically compare undergraduate education majors' evaluations of an instructor's teaching of social studies methods courses in the Spring and Summer semesters of 1996.

The instrument used was the College of Education and Psychology's Course and Instructor Evaluation Summary. Responses to the eight statements that were directly related to students' appraisals of the instructor's classroom teaching were used for analysis. Data were analyzed using the Mann-Whitney U statistical technique. Measures of students' evaluations of the instructor's effectiveness were obtained from a sample of 25 preservice teachers at the end of the Spring semester and from a sample of six preservice teachers at the end of the Summer semester.

Statistical analysis found statistically significant differences ($p<.01$) between evaluations of the instructor from students in the Spring and Summer classes on two of the eight evaluational statements. Students in the Summer class gave the instructor higher rankings for ability to foster understanding of principles underlying the subject matter. Students in the Summer class also gave the instructor higher rankings in overall comparison with other instructors.

This study's conclusion was that students gave higher evaluations of the instructor's classroom teaching that encouraged their active involvement in learning and applying social studies teaching methods. This study's implication was that further statistical comparisons of students' responses to statements included in instructor evaluations may promote a knowledgeable basis for developing increasingly reliable and useful statements for measuring instructional effectiveness in any given education course.

AN IMPROVEMENT ON THE COOPERATIVE LEARNING STRATEGY JIGSAW II AT THE SECONDARY SOCIAL STUDIES LEVEL.

Dwight C. Holliday, Ben C. Rain High School (AL)

The purpose of this qualitative study was to continue and improve on the research of a doctoral dissertation. The same criteria were used in the replication of this doctoral research with only slight modifications. The population consisted of 90 ninth-grade students in World Geography. The time frame was increased from seven weeks to 17 weeks during the Spring semester of 1997. Jigsaw II was the strategy used with several slight modifications to the strategy, introduction of lesson, and quizzes to check for accuracy as well as a review for assessment. These modifications addressed the concerns of the student population in the previous research as expressed in a Cooperative Learning Survey administered in Spring of 1995. The same survey

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was administered to the 1997 population during the replication of the research. The survey and test scores were used to determine the effectiveness of the Cooperative Learning Strategy Improved Jigsaw II in a secondary social studies classroom.

The responses to the 1997 survey were similar to the students' responses in the 1995 survey. Most students felt that they learned more geography and enjoyed the teaching style better than just lecturing or doing seat work. The strategy allowed the students to be responsible for their own learning and to learn to work together to share information. While these overall changes addressed in the research did relieve the students' concern for accuracy of their answers, these changes, as in the original research, did not significantly improve academic grades. The surveys did, however, indicate that the perceived learning and enjoyment were enhanced and, therefore, the students perceived to learn more.

The overall result, as in the 1995 research, was that even though the Cooperative Learning strategy Jigsaw II (now IV) did not improve academic scores on the whole, it did improve the perceived impression that the students learned more and thus performed better in the social studies class.

2:00 p.m.-2:50 p.m. **SCHOOL RESTRUCTURING**
(Discussion Session)..Parlor 104/106

PRESIDER: Charles M. Achilles, Eastern Michigan University

OUTCOMES RELATED TO ENGAGEMENT WITH AND USE OF DATA IN SCHOOL IMPROVEMENT PLANNING

E. Dean Butler, Marty Alberg, and Jeanine H. Rakow,
The University of Memphis

The Tennessee School Climate Inventory (TSCI), which measures seven dimensions of school organizational climates associated with effective schools, has been used for several years to provide school improvement planning data for schools across the state of Tennessee. Anecdotal information has revealed that when school faculties actively engage in the use of climate data and develop increasing data interpretation skills over time, positive changes take place. The research goal directing this study was to examine relationships between the extent and manner of use of school climate data in school improvement planning and organizational changes across time.

Schools whose faculties completed the TSCI in Spring 1997 because of their participation in state-sponsored school improvement and professional development programs were selected for this study. An implementation instrument was developed and administered to school leaders in Summer 1997. The instrument targeted the extent of faculty involvement and interest, time spent analyzing and interpreting school climate data, and the importance of this information to school improvement.

Schools were categorized as having high, medium, or low engagement with data-based school improvement planning. Repeated measures analysis of variance was used to determine differential effects across time among levels of implementation. Findings summarized organizational climate changes associated with the nature and extent of the use of climate data in school improvement planning.

EVALUATION AND ASSESSMENT IMPROVEMENT: PERCEPTIONS OF ROLE RESPONSIBILITY

Charles Worthy Babb and Tracey Radcliff Ring,
Middle Tennessee State University

The purpose of this study was to examine the perceptions of variable school district populations with regard to the improvement of measurement and assessment practices in the public schools. Using a series of statements that characterize measurement activities both in the classroom and at the school or school district level, 151 individuals responded to Measurement: Whose Responsibility Form, which had been piloted in a graduate course. Respondents were required to simply check whose responsibility it was to improve the measurement roles specified by the 25 items on the form.

T-tests for independent groups were used to examine the mean differences among the four categories of respondents: classroom teachers, principals, superintendents, and school board members.

Statistically significant differences were found between the perceptions held by principals and both the classroom teachers and superintendents regarding whose responsibility it was to initiate improvement activities.

2:00 p.m.-2:50 p.m. HIGHER EDUCATION (Display Session)................ Directors Room

PRESERVICE EDUCATION MAJORS' BRAIN HEMISPHERICITY, LEARNING STYLES, ENVIRONMENTAL PREFERENCES, AND COURSE-RELATED BEHAVIORS

Roy L. Jacobs, Chhanda Ghose, and Jimmy D. Lindsey, Southern University;
Johan W. van der Jagt, University of West Alabama;
and Rangasamy Ramasamy, Florida Atlantic University

The purpose of this pilot study was to determine if preservice education majors by general and student characteristics (e.g., gender, geographic area, major, and so forth) have different brain hemispheric processing modes, learning styles, environmental preferences, and course-related behaviors (e.g., note taking). The population for this pilot study was 45 students enrolled in an undergraduate introduction to education course at an historically black, doctoral-level university. Thirty-five of these students were selected to participate as subjects, and 33 participated by completing one or more of the research instruments. Between- (e.g., gender, geographic area, and major) and within-subjects (e.g., environmental preferences) designs were used to conduct the study. Dependent variables included the subjects' Hemispheric Mode Indicator, Learning Style Inventory, and Productivity Environmental Preference Survey findings and selected responses on a four-part questionnaire. SPSS/PC+ 7.0 descriptive and inferential statistical procedures were used to analyze the data. Null hypotheses were tested at the .05 alpha level. Results indicated that the subjects have different brain hemisphericity, learning styles, environmental preferences, and selected course-related behaviors. Specific findings, conclusions, limitations, and recommendations for future research were presented to conferees attending this display session.

LANGUAGE, CULTURE, AND PEDAGOGY: THREE COMPONENTS OF AN INTERNATIONAL TEACHING ASSISTANT WORKSHOP

Sue S. Minchew and Marion B. Couvillion,
Mississippi State University

In an effort to optimize the teaching performance of international teaching assistants (ITAs), Mississippi State University offers a week-long International Teaching Assistant Workshop each August. For this workshop, the instructors have developed a teaching manual and a student handbook containing both original and researched materials. Instructors also use a booklet on southern culture written for the ITAs by undergraduate students at Mississippi State. These instructional materials center on language, culture, and pedagogy as they relate to the ITA in the American classroom.

The language/speech portion of the handbook provides word lists, pronunciation guides, and pictorial representations of vowel and consonant sound production. The handbook also introduces the ITAs to idioms, colloquialisms, and proverbs common to American language. Cartoons and the southern culture booklet, complete with pictures of Mississippi places and events, aid in the acculturation of the ITAs. In addition, the handbook describes teaching situations that facilitate discussion and role-playing by the ITAs.

The display of these original teaching materials was considered to be beneficial not only to international students but also to professionals involved in preparing ITAs for the American university classroom.

PREDICTING ACHIEVEMENT IN COLLEGE-LEVEL FOREIGN LANGUAGE COURSES

Christine E. Daley and Phillip Bailey, University of Central Arkansas,
and Anthony J. Onwuegbuzie, Valdosta State University

Enrollment in a foreign language class increasingly has become an essential part of college students' programs of study. As a result, there has been an influx of students with diverse backgrounds, interests, and aspirations enrolling in foreign language courses in order to fulfill degree requirements. Unfortunately, many students underachieve in foreign language courses. Thus, this study of 223 university students sought to determine predictors of foreign language achievement. A setwise multiple regression analysis revealed that six variables (i.e., gender, academic achievement, expected overall average for current language course, value placed on cooperative learning, perceived scholastic competence, and foreign language anxiety) contributed significantly to the prediction of foreign language achievement. Specifically, students who tended to have the greatest problems acquiring a foreign language tended to be male, have low levels of academic achievement, have low expectations, value cooperative learning, have a negative perception of their scholastic competence, and have the highest levels of anxiety. Overall, foreign language anxiety was the best predictor--explaining 14.6% of the variance in achievement. Academic achievement, the next best predictor, explained 11.4% of the variance. The educational implications of these findings for improving the acquisition of a foreign language were discussed, as were suggestions for future research.

3:00 p.m.-3:50 p.m. **TEACHER EDUCATION (Discussion Session)................. Arkansas**

PRESIDER: William A. Spencer, Auburn University

VALUES OF AT-RISK STUDENTS AND THEIR PERCEPTIONS OF THE SCHOOL EXPERIENCE - GUIDES FOR TEACHER AND ADMINISTRATOR TRAINING PROGRAMS

Barbara L. White, University
of Southern Mississippi

The purpose of the study was to determine values of ninth- and twelfth-grade students in the South and Midwest and to determine if a relationship existed between the school experience and value preferences. Measures of 18 instrumental and 18 terminal values were obtained from a sample of 200 students. Attitudes toward and perceptions of administrators, teachers, peers, and the school culture were also assessed.

Six research questions were tested: (1) to identify the values of black ninth- and twelfth-grade students in Jackson, Mississippi and Toledo, Ohio; (2) to determine the value system of the selected population; (3) to ascertain if there were significant differences in the rankings of specific values among reported value systems of the eight groups - by city, grade level, and gender; (4) to determine the comparative attitudes of males and females toward the school experience; (5) to ascertain if the values of secondary school seniors were more homogeneous than those of secondary-school freshmen; and (6) to determine if there was a relationship among attitudes toward the school experience and value preferences.

A multivariate comparison of mean levels of instrumental and terminal values was significant by grade level, city, and gender. Significant also were student attitudes toward and perceptions of administrators, teachers, peers, and the school culture, which portend modification of educational programs.

REFLECTIONS ON LEARNING TO TEACH AT THE SECONDARY LEVEL

Beth Counce, University of Montevallo

At a small southern university, the secondary education students take the majority of their course work in their content area and take two generic methods courses in the Education Department. Because the students take only two courses that focus on methodology and management, it is critical that these courses adequately prepare the students for all aspects of their teaching careers. This study was designed to determine the degree to which the students felt prepared for a career in teaching.

Twenty secondary education students who had completed their internships were given a questionnaire that included a five-point Likert scale on the areas of Knowledge Base and Planning for Instructional Skills. Open-ended questions that were related to Reflection on Teaching Experiences were also included. Responses were analyzed using frequencies and percentages. The summary of the open-ended question responses was also analyzed.

The majority of the students indicated that they felt strong in the areas of Knowledge Base and Planning for Instructional Skills. There were only a few categories in which they felt average or fair. The results were also analyzed according to graduate, undergraduate, content area, and sex. No discernible difference was found among the categories. The results of this study were to enhance the effectiveness of the content in the secondary methods courses.

A SOCIOCULTURAL LEARNING PARTNERSHIP MODEL FOR TEACHING CLASSROOM ASSESSMENT

Theresa M. Akey and Nancy M. Ares,
Auburn University

The purpose was to examine the implications of implementing a learning partnership model for teaching preservice classroom assessment courses. Traditional methods of teaching undergraduate assessment raise questions concerning the relevance and practicality of course content. National assessment standards now require teachers to use the most authentic assessments available, and teacher training programs must shift their focus accordingly.

The learning partnership model is designed to increase the relevance and practicality of course content. Affective and cognitive change are promoted through classroom interactions that emphasize mutual responsibility for the shared construction of knowledge. The model has five characteristics: (1) mutuality and intentionality of shared responsibility in the partnership, (2) transfer of learning to settings beyond the immediate classroom through authentic, situated learning experiences, (3) creation of personal meaning, (4) development of domain competence by developing skills tied specifically to research in best teaching practices, and (5) modeling taking responsibility for and self-regulation of the learning process.

Two undergraduate assessment classes were designed to reflect the learning partnership model. Students learned about assessment through authentic activities, specifically the creation of a unit lesson plan and related assessment strategies based on disciplinary standards. Instructional strategies focused on the demonstration of key concepts and skills, collaborative group work, and individual conferencing with students.

The paper focused on two sets of issues that emerged from implementing the learning partnership model in a preservice undergraduate assessment class. The first set concerned student involvement in the learning partnership, including providing scaffolding for students with varying learning preferences, experiences, and majors; changing preservice teacher beliefs and values; and encouraging student responsibility in the partnership. The second set involved the teacher education program itself, including scope and sequencing, practical relevance of course content, and linking assessment to other education courses.

3:00 p.m.-3:50 p.m. **ADULTS AND DISABILITIES**
(Discussion Session)..Ridgelake

PRESIDER: Nancy Ares, Auburn University

THE RELATIONSHIP AMONG THE NUMBER OF RESOURCES USED IN HEALTH EDUCATION LEARNING PROJECTS AND THE EDUCATIONAL ATTAINMENT LEVEL FOR ADULTS WITH HIV DISEASE

M. Craig Hankins, The City of New Orleans

The purpose of this study was to determine the relationship among the number of resources used in health education learning projects and the educational attainment level. As part of a qualitative study, a modification of Allen Tough's Interview Schedule for Studying Some Basic Characteristics of Learning Projects (1975) was used to collect count data (number of resources used and educational attainment level) from 36 individuals with HIV disease.

The sample was grouped by educational attainment level: Lower--10 to 14 years (19 participants or 53%) and Higher--5 to 21 years (17 participants or 47%) of formal education. The number of resources used in health education learning projects was 12.6 for the Lower group and 14.8 for the Higher group. Regression analysis did not provide support that the number of resources used in the health education learning projects was statistically significantly related to the educational attainment level (F=2.7158, df=1/34, p=.1086, RSQ=.0740).

Analysis of the qualitative data indicated that participants had used resources based on availability, not their educational level. In addition, advances in technology may have narrowed, or in some cases broadened, the number of resources used in a health education learning project.

EMPLOYER PERCEPTIONS OF PERSONS WITH DISABILITIES

Kelly S. Nunley and Kenneth Clawson,
Eastern Kentucky University

The attitudes of employers toward workers with disabilities participating in supported employment programs were examined. A survey sample of 30 employers, who had hired and/or supervised supported employment participants, was randomly selected from 120 who met the criteria. All were located in three counties in south-central Kentucky. The sample consisted of retail businesses (42.7%), manufacturing and wholesale (24.2%), and service-oriented businesses (10.9%). Government employers accounted for 13.1%.

A 25-item attitude instrument using a seven-point Likert-type rating scale was used to gather the data. In general, employers responded with positive attitudes to the placement of supported employment and considered the program excellent. It appeared to be a "win-win" situation for both the employers and the supported employees. The program develops and capitalizes on the strengths of workers with disabilities and was not too difficult to integrate in the workplace. The supported employment program is intended to benefit business in terms of productivity and profitability, as opposed to a social program in which individuals with disabilities are employed for charitable reasons.

IMPACT OF LEARNING DISABILITIES IN DESIGNING AND CONDUCTING ADULT VOCATIONAL EDUCATION AND TRAINING PROGRAMS FOR BUSINESS AND INDUSTRY

Herbert R. Horne, Jr. and Jacquelyn P. Robinson,
Auburn University

The number of learning disabled adults is large, arguably around 5% of the total population. The learning disabled are disproportionately represented among workers with low educational levels and the unemployed. Welfare-to-work programs, business restructuring, and technology upgrading drive an increasing need for vocational training programs for these individuals. The ineffectiveness of traditional educational programs for learning disabled individuals is illustrated by a significantly higher educational dropout rate when compared to their non-disabled counterparts. The problem was to determine the extent to which learning disabled individuals participated in vocational education and training programs for business and industry and then to examine the impact their presence had on these programs.

A data collection survey instrument was developed and validated. Data were collected through administering this survey to 61 business and industry trainers and 14 vocational educational teachers. Additional qualitative data were obtained through interviews with public education officials and examination of public records. Data were analyzed using both qualitative analysis and descriptive statistics.

There existed a disproportionate number of learning disabled persons among entry-level training programs for persons with high school education or less. Programs not designed to accommodate learning disabilities resulted in low success rates for learning disabled workers. Educational programs, especially entry-level programs for persons with less than a high school education, should accommodate for learning disabilities.

3:00 p.m.-3:50 p.m. **MATHEMATICS EDUCATION**
(Discussion Session)..Players

PRESIDER: Carolyn Reeves-Kazelskis, University of Southern Mississippi

USING WRITING JOURNALS IN THE MATHEMATICS CLASS

Pamela A. Taylor, Mississippi State University

A review of the literature suggests that writing serves a dual purpose. Writing helps students to learn better, and by writing more, students improve their writing. Writing across the curriculum supporters advocate that the integration of writing in the subject areas not generally associated with writing should aid in developing students' writing, not only for the sake of having them to write, but also to have them write better. Journal writing in the mathematics class provides a means and opportunity for students to do this.

The fourth goal in the 1989 Curriculum and Evaluation Standards for School Mathematics, by the National Council of Teachers of Mathematics (NCTM), is for students to learn to communicate mathematically. The call implies that students should be given opportunities to use all communication vehicles available. Writing journals is a vehicle for communication that mathematics teachers can easily integrate in their classroom, thereby helping students to not only learn but also aid the development of their mathematical communication skills.

It was the position of this paper to support the premise that writing stimulates and enhances learning. Further, the use of writing journals in the mathematics classroom will help students learn to communicate mathematically. Writing journals gives students a medium in which to use mathematical terminology for explaining concepts and applications and, thereby, developing and clarifying their understanding of the concepts and applications.

DEVELOPING RATIONAL NUMBER UNDERSTANDING THROUGH UNITIZING

Nancy Alexander, Louisiana Tech University

The rational number domain is known for the great difficulties it presents for students and teachers. As students construct knowledge of fractions, they search for connections to existing knowledge. Procedures from the whole number domain are tried, but many do not work on the new numbers! Recent research has focused on the unit as a way to link whole number and rational number understanding.

Studies have suggested that students intuitively form units, and that this intuitive knowledge can serve as a foundation for rational number understanding. Golding found that the unit concept can link whole number and rational number domains for addition and subtraction. This study examined the role of the unit as a link between whole and rational number domains for multiplication and division. Further, it explored whether students' learning could carry over from the group setting to individual performance, and whether their new understandings could be applied to standard school tasks.

This study described the evolving cognitive processes of four seventh-grade students of varying mathematical ability selected from a seventh-grade class of a rural K-12 school. A 15-lesson teaching experiment was designed to build on students' existing knowledge of the unit and extend this to the rational number domain. Data were collected through videotapes, audiotapes, researcher journal, students' written work, and individual student interviews. Several conclusions were drawn: (1) students developed a flexible concept of unit, (2) modeling provided continuity between conceptual domains, (3) equipartitioning remained a persistent difficulty, (4) a sustained focus on the measuring unit was difficult, (5) faulty selection and use of measurement units handicapped the development of models, (6) unitizing skills endured and are extendable, and (7) models can inform procedural methods and/or provide alternative solution methods.

The study pointed to the need for more school practice in partitioning and measurement activities and more extensive use of modeling to facilitate development of unit concepts. Future research should investigate strategies for enabling students to overcome constraints of primitive models of division.

INTERSPERSING ADDITIONAL BRIEF, EASY PROBLEMS TO INCREASE ASSIGNMENT PREFERENCE ON MATHEMATICS READING PROBLEMS

Mark E. Wildmon, Christopher H. Skinner, and Ashley McDade,
Mississippi State University

The purpose of this study was to extend choice research on academic assignments by presenting 61 college students with a control assignment containing eight, 2-digit x 2-digit + 2-digit x 2-digit mathematics reading problems and an experimental assignment that contained eight equivalent, 2-digit x 2-digit + 2-digit x 2-digit problems and three additional interspersed 4-digit + 4-digit mathematics reading problems.

Dependent samples t-test was used to compare students' performance on control and experimental assignments across these mathematics performance variables. A post-assignment questionnaire was used to collect data on effort, time, and difficulty perceptions. This questionnaire was also used to collect homework preference data. Chi-square goodness of fit was used to analyze the questionnaire data. All differences were considered significant at the $p < .05$ level.

Significantly more students ranked the 4 + 4 assignment as being less difficult and requiring the least amount of effort. When given a choice between the two assignments for homework, significantly more students chose the 4 + 4 assignment. No differences were found on accuracy levels between assignments. These results supported earlier research that suggested that students' preference for assignments could be altered by interspersing additional brief, easy items among more difficult target items.

3:00 p.m.-3:50 p.m. **GIFTED EDUCATION (Discussion Session)...................... Missouri**

PRESIDER: Linda Cornelious, Mississippi State University

CONFIRMATION OF A MULTIPLE FACETS MODEL OF CREATIVE BEHAVIOR IN COLLEGE STUDENTS

David T. Morse, Mississippi State University

Researchers in the field of creativity, such as Guilford, Torrance, and Davis, characterize creative behavior as having many different facets. Yet, even Torrance includes a single summary score, the creativity index, in his revised scoring guidelines for the Torrance Tests of Creative Thinking. Others, such as Kirton, suggest that individual differences in creative behavior are more due to style than level. A model incorporating these perspectives was proposed, having the factors of creative talents, style, and originality to account for differences in responses on six measures of creative behavior.

Scores of 133 undergraduates from Sounds and Images, Kirton's Adaptation-Innovation Inventory, Something About Myself, What Kind of Person Are You?, and Forms A and B of the Khatena-Morse Multitalent Perception Inventory were correlated, and the three-factor model was evaluated using the LISREL package. The results suggested a satisfactory fit of model and data, X2(7, N = 133) = 6.59, p = .47. Other indicators, including goodness of fit, adjusted goodness of fit, and standardized root mean square residual, also suggested adequate fit. Scores on the three factors were correlated somewhat (rs between .24, .42), suggesting some overlap. Alternative one- and two-factor models were also tried, and found not to correspond adequately with the data.

These results confirmed the ideas of creative behavior being multidimensional rather than unidimensional, and that creative style has become a viable part of understanding creative behavior. This mixture of creative talents, style, and originality has several important implications. First, persons involved in training of creative behavior may wish to consider how creative style fits in the picture. Second, thorough appraisal of creativity appears to require multiple indicators. Practitioners might be better served by attending to factor scores on measures of creativity than just total scores. Thus, reliability and validity of factor scores would take on greater importance in selecting appropriate measures.

SCHOOL CLIMATE: A SIGNIFICANT FACTOR IN PREDICTING MINORITY STUDENT PARTICIPATION IN GIFTED PROGRAMS

Tandra Tyler-Wood, Mike Cass, Les Potter,
State University of West Georgia

The purpose of this study was to identify the combination of variables that were most predictive of high achievers in general and high African American achievers. High achievers were defined as students who scored at or above the 90% percentile on the ITBS in reading and/or math. Measures of achievement (ITBS scores), minority representation in the schools, and teachers, parents, and students perceptions of school climate were collected in a large school district located in the Southeast.

Multiple regression analysis identified several significant variables associated with minority representation in gifted education. The variable most predictive of this representation was "other individuals similar to me in the gifted program."

The conclusion from this study supported the notion that gifted African American students value having other gifted African American students in their classes. This association reduces their social isolation, and promotes a sense of identity and worth.

EFFECTS OF TIMED VS. UNTIMED CONDITIONS ON RATIO DERIVED FLEXIBILITY MEASURES FOR A DIVERGENT PRODUCTION TASK IN GIFTED ADOLESCENTS

Gregg A. Johns, Linda W. Morse, and David T. Morse,
Mississippi State University

The purpose of the study was to examine the effects of timed (three-minute) vs. untimed (unspecified five-minute) conditions on an alternate uses divergent production task in gifted adolescents. Fluency, flexibility, and ratio measures (flexibility/fluency) were obtained from a sample of 20 adolescents in attendance at a summer gifted camp. Subjects were prompted to produce creative responses on two traditional paper and pencil alternate uses tasks (timed vs. untimed). The two tasks were counterbalanced with subjects randomly assigned to initial task presentation to control for sequencing effects.

Dependent t-test means comparisons were conducted within-subjects on fluency measures, traditional flexibility measures, and flexibility measures using ratio scores. Results indicated statistically significant mean differences for timed vs. untimed conditions on fluency and traditional flexibility measures (p<.001) for both measures. However, no statistically significant mean differences were found for ratio flexibility scores.

Subjects produced statistically significantly greater mean fluency and flexibility responses on untimed conditions. However, ratio flexibility measures failed to produce the same results. These findings supported the literature in the confounding effects of fluency scores on traditional flexibility measures.

3:00 p.m.-3:50 p.m. **AT-RISK STUDENTS (Discussion Session)................ Parlor 104/106**

PRESIDER: Ann D. Chapman, Eastern Kentucky University

THE PREVALENCE OF BINGE EATING DISORDER AMONG AFRICAN AMERICAN UNIVERSITY STUDENTS

E. Joan Looby and Jill Holston,
Mississippi State University

Because much current research on eating disorders excludes African American females, the prevalence of eating disorders is unknown among this population. They are unlikely to seek professional help for eating disorders because it is assumed that this problem does not exist. Tentative research and clinical experience suggest otherwise. As they assimilate, African American females may adopt the ideals of thinness perpetuated by the dominant culture; therefore, weight becomes a critical issue. The emphasis on thinness may lead to problematic eating behaviors as they resort to dangerous methods of weight control. This cycle of body dissatisfaction-diet-diet failure-low self-esteem-depression-susceptibility to overeating may lead to Binge Eating Disorder (BED), a precursor to bulimia nervosa. This position paper discussed African American females as an at-risk group for developing BED. Current attention to this problem would provide clinicians and researchers with new knowledge and awareness about a serious health problem in a neglected population.

SELECTING A TARGET BEHAVIOR: AN IMPORTANT CRITERIA FOR INTERVENTION SUCCESS

Linda Brown, Merilee McCurdy, and Christopher H. Skinner,
Mississippi State University

Determining the appropriate target behavior(s) can influence the effectiveness of an intervention. In many cases, a referral for academic deficiency involves multiple problem behaviors, and the evaluator is faced with the difficult task of determining which behavior to target for intervention. This process becomes a critical component for treatment success.

This paper identified and analyzed different criteria for choosing target behaviors. The behavior selected for intervention may be one that is the most problematic for the teacher or that takes the most time away from the teacher's duties. Also, a behavior that interferes with the daily functioning of the child can be targeted. Prior experience of the teacher or assessor could influence the choice of the target behavior. Other recommendations would be to target keystone behaviors, behaviors that are the quickest or easiest to change, or behaviors that will lead to the most success. By providing a structure for prioritizing problems, it was hoped that there would be improvement in the short- and long-term effectiveness of remediation procedures.

HARRIS HALL - A STEP TO INDEPENDENT LIVING FOR THE BLIND AND VISUALLY IMPAIRED

Rodney W. Woods, Louisiana School
for the Visually Impaired

The purpose of this study was to determine the effects of independent apartment living at a residential school for the blind and visually impaired and the extended effects of this program after the student's graduation. The independent living dormitory, Harris Hall, introduced four students each semester to an environment of independent living. No longer could these students rely on a dormitory counselor to provide for their daily necessities. This program introduced the students to concrete, practical information on social competencies, self-care, maintaining their personal environment, and use of leisure time.

Success of the students was measured by levels of independence achieved when returned to their assigned dormitory and contact with parents after the students returned home for the weekend. Follow-up was conducted through the use of surveys, and personal and parental contact.

Significant results indicated that students who resided in Harris Hall had a higher success rate of living independently after graduation than those who did not receive the 18-week experience.

4:00 p.m.-4:50 p.m. **MULTICULTURAL EDUCATION**
(Training Session - 1 hour)..Louisiana

MULTICULTURAL PEDAGOGY FOR EMPOWERMENT

Aziz Talbani, The University of Memphis

The evolution of multicultural pedagogy has been suffering from a lack of critical theoretical grounding. The proponents of multicultural pedagogy have supported the idea of transforming school curricula by inclusion and integration; however, in practice the educators have created "packages" of cultural products and pedagogical modules assuming that these will satisfy the emotional, intellectual, and cultural needs of various "ethnic" groups. These cultural packages are based on race or ethnicity in which diverse groups of people are lumped together under one label, ignoring diversity that exists among these groups, and also exclude the debate about the empowerment of individuals within their own cultures.

The focus of the training was on the discourse and designing of inclusive multicultural curriculum that aimed at empowering all students. The objectives of the training were as follows: (1) empowering all students through their own narrative to "connect" with experiences of their own and others, (2) using art and literature in curriculum to achieve goals of empowerment, and (3) through critical pedagogy liberating learning from dogma of academic culture, including the dogma of critical pedagogy.

The training was designed to enable practitioners to critically examine their assumptions about power relations in society and in the school and the role of culture in maintaining social hierarchy. It introduced participants to the "Cultural Connection" (C-Connection) model, developed by the instructor, that helped to improve pedagogical practices in the classroom. The C-Connection model emphasized the individuality of each student and the unique cultural interpretation that each brought to the classroom. The training was interactive, engaging participants in interpreting, developing, and experiencing multicultural curriculum and connecting with "others."

4:00 p.m.-4:50 p.m. **COLLEGE STUDENTS (Discussion Session)....................Arkansas**

PRESIDER: Ava F. Pugh, Northeast Louisiana University

FOREIGN LANGUAGE ANXIETY AMONG COLLEGE STUDENTS

Anthony J. Onwuegbuzie, Valdosta State University,
and Phillip Bailey and Christine E. Daley,
University of Central Arkansas.

Foreign language anxiety is a complex phenomenon that has been found to be one of the best predictors of foreign language achievement. This study of 210 university students examined factors that predict foreign language anxiety. A setwise multiple regression analysis revealed that 14 variables (i.e., gender, age, academic achievement, semester course load, prior history of visiting foreign countries, prior high school experience with foreign languages, expected overall average for current language course, perceived intellectual ability, perceived scholastic competence, perceived appearance, perceived self-worth, cooperativeness, value placed on competitive learning, and academic locus of control) contributed significantly to the prediction of foreign language anxiety. Analysis of variance, which included trend analysis, revealed that freshmen and sophomores reported the lowest levels of foreign language anxiety, and that anxiety levels increased linearly as a function of year of study. The educational implications of these findings for understanding foreign language anxiety and for increasing foreign language learning were discussed, as were suggestions for future research.

MEASURING PERFORMANCE ANXIETY IN COLLEGE STUDENTS

Deborah Prentice, The University of Alabama

The purpose of the study was to determine anxiety-related situations that could have demonstrative effects on college performance. These situations can be described as causes and curbs of anxiety in college students. A sample of 208 undergraduate, multiclass-level, business students completed the anxiety instrument. Potential anxiety-laden situations were presented to the student to obtain measured responses.

Cronbach alpha instrument reliabilities for anxiety causes and curbs were obtained at .88 and .82, respectively. Principal factor analysis retained seven factors. Liserl8 construct analysis of data proved a close model fit with a chi-square of 14.89, 12df, p=2.5.

Subtle comparisons were revealed between anxiety-related situations that could enhance the knowledge of counselors and teachers in understanding the college environment as perceived by the student. These anxiety-related situations can cause barriers to learning. Through understanding these comparisons, some barriers to learning may be eliminated.

IDENTITY PROCESSES IN COLLEGE-AGE STUDENTS

Wendy K. Knighton, C. Jeffery Knighton,
and Edith Miller, Auburn University

According to Erikson (1956), the major developmental task of adolescence has been the formation of a stable sense of identity. Marcia (1966) extended Erikson's theory, proposing self exploration and commitment as two orthogonal dimensions that combine to form four identity classifications: identity achievement, moratorium, foreclosure, and diffusion. These classifications have been widely employed in research on identity (Berzonsky, 1988; Waterman, 1982). Although the classifications were intended to establish the empirical validity and operationalize the tenets set out by Erikson, Marcia (1989) and other researchers (Markstrom-Davis, Ascione, Braegger & Adams, 1993; Twale, 1990) have addressed intervention concerns.

This paper provided a review of the literature regarding identity status for college-aged students. In addition, it integrated research that indicates that identity status may reflect different social-cognitive processing orientations (Berzonsky, 1988). Berzonsky (1994) contends that individuals differ in the manner in which they process, evaluate, and utilize self-relevant information according to identity status. Achievers and moratoriums use an information seeking approach; foreclosures adopt a normative stance and diffusions engage in avoidance tactics. Commitment acts as a moderator between identity status and information processing.

Implications for intervention were discussed with attention to these underlying social-cognitive processes. Individual differences in attention, participation, and response to intervention efforts may reflect the interaction of processing orientation and commitment status.

4:00 p.m.-4:50 p.m. PRINCIPALS (Discussion Session)..............................Ridgelake

PRESIDER: Randall Parker, Louisiana Tech University

USING AN OBSERVATIONAL FRAMEWORK TO INVESTIGATE THE MANAGERIAL BEHAVIOR OF ELEMENTARY SCHOOL PRINCIPALS

Jack Blendinger, Mississippi State University, and Gail Snipes,
University of Southern Mississippi

This qualitative case study investigated the managerial behavior of five elementary school principals in their school settings (i.e., job environments). Although many studies of principals have been conducted using indirect investigation methods, such as surveys that measure characteristics of the person in the position, very little field-based research focusing on the performance of principals has been conducted using structured observational techniques. The user-friendly framework for studying managerial behavior used in this investigation is suitable not only for university researchers, but made it possible for graduate students preparing to be school administrators to become involved in authentic learning experiences by participating in the study as action researchers. The user-friendly framework utilized in this investigation was shared with persons attending the session.

Data were collected during approximately 40 hours of systematically observing principals at work in their school environments. Although observational methods are more time-consuming than self-report measures, they often yield more accurate data. Descriptive information obtained in this study was grouped into themes for purposes of analysis, interpretation, and reporting.

Findings indicated that the observed principals tried to keep current in their administrative tasks (e.g., returning telephone calls) and attempted to be visible presences in their schools through managing by walking about but were frequently interrupted. Interruptions and unscheduled meetings were common occurrences. Results of this study should benefit both practitioners wanting to improve their daily performance and educators engaged in the preparation of principals.

MANAGERIAL BEHAVIOR OF AN AWARD-WINNING ELEMENTARY SCHOOL PRINCIPAL AT THE CLOSE OF THE SCHOOL YEAR

Wallapha Ariratana, Xiao Zhang, and Jack Blendinger,
Mississippi State University

This qualitative case study investigated the managerial behavior of an award-winning elementary school principal in her work environment at the close of school in May. Although many studies of principals have been conducted using indirect investigation methods and a few studies using field-based structured observational techniques have been done, an extensive review of the literature yielded no evidence that the managerial behavior of a highly acclaimed principal had ever been studied at the end of a school year. No published information could be found telling how such a principal closes the school year or what challenges she faces.

Data were collected during approximately 25 hours of systematic observing the principals at work in her school environment. Although the observational method is more time-consuming than self-report measures, it holds much potential for yielding more accurate data. Descriptive information obtained in the investigation was grouped into themes for purposes of analysis, interpretation and reporting.

Findings indicated that the observed principal worked diligently at being on top of the many events taking place around her by trying to keep current in administrative tasks, selecting new staff, and attempting to be a visible presence in the school through managing by walking about. Interruptions and unscheduled meetings, however, were common occurrences. In producing information that has never been previously reported, the results of this study should benefit both practitioners wanting to improve their daily performance and educators engaged in the preparation of future principals.

MANAGERIAL BEHAVIOR OF A NOVICE ASSISTANT PRINCIPAL AT AN AWARD-WINNING ELEMENTARY SCHOOL AT THE CLOSE OF THE SCHOOL YEAR

Xiao Zhang, Wallapha Ariratana, and Jack Blendinger,
Mississippi State University

This qualitative case study investigated the managerial behavior of a novice assistant principal at an award-winning elementary school in her job environment at the close of school in May. Although many studies of principals have been conducted using indirect investigation methods and some field-based studies using structured observational techniques to investigate the managerial behavior of principals have been done, an extensive review of the literature yielded no evidence that an assistant principal had ever been studied using direct observational techniques at the end of a school year or at any other time during the school year. No published literature telling what an assistant principal does to help close the school year could be found.

Data were collected during approximately 25 hours of systematically observing the assistant principal at work in her school environment. Although the observational method is more time-consuming than self-report measures, it holds much potential for yielding more accurate data. Descriptive information obtained in the investigation was grouped into themes for purposes of analysis, interpretation and reporting.

Findings indicated that the observed assistant principal worked diligently at helping the principal stay on top of the many events taking place at the school. Interruptions, student discipline problems, and unscheduled meetings were common occurrences. By providing information that has never been previously reported, the results of this study should benefit both practitioners wanting to improve their daily performance and educators engaged in the preparation of future school administrators.

4:00 p.m.-4:50 p.m. **ENGLISH EDUCATION (Discussion Session)....................Players**

PRESIDER: Diane Green, Mississippi State University

THE VALUES OF TEACHING LITERATURE: THE MANIFESTATION OF A TEACHER'S VALUES IN THE AFRICAN AMERICAN LITERATURE COURSE

Dave S. Knowlton, The University of Memphis

An argument can be made that, because communication is inherently persuasive, values are inherent in the teaching act. If all communication is persuasive--and thus, value-laden--the primary question is not whether or not to teach values; instead, the question is how to "deal with" values. How do we avoid imposing our opinions and interpretations of reality on students? Should we avoid imposing our values on students? What is the best way to monitor the way our values manifest themselves? The purpose of this exploratory case study was to use a hermeneutical perspective for determining how a veteran English teacher deals with values.

Analysis was based on data collected through interviews and observations in an African American Literature course. Findings indicated that the instructor unconsciously used a simplistic communication model to monitor the manifestations of his values. Specifically, the instructor identified values as being related to the self, to the context, to the messages, and to the students. By using this model as a pedagogical heuristic, the instructor could examine the value manifestations and impact of his pedagogical decisions.

These findings alluded to the need for a value-monitoring heuristic and model that teachers can use as a tool for thinking about, and monitoring, values. Additional theoretical and empirical work is needed to develop such a model.

A COMPARATIVE ANALYSIS OF PRESERVICE TEACHERS' AND PROSPECTIVE ENGINEERS' LEARNING STYLES

Linda T. Coats, Mississippi State University

The purposes of this study were to identify the learning styles of juniors and seniors enrolled in a junior level writing course and to investigate the differences in the learning styles of preservice teachers and prospective engineers. Another purpose of this study was to identify ways for writing teachers to present instructional materials.

Students enrolled in a junior-level writing course were administered the Myers-Briggs Type Indicator, which uses personality type to identify preferred learning styles. These 250 students were preservice teachers and future engineers. The data collected were analyzed using the Statistical Package for the Social Sciences (SPSS) release 6.1.2. Descriptive statistics, and chi-square statistics were used to analyze the results.

The findings indicated that there were no significant differences in the learning styles of the two groups of students. However, the perception and intuition traits were identified as stronger styles in the engineering students rather than in the preservice teachers. The sensing trait was a dominant style in both groups.

The results of this study can be used to assist writing instructors in identifying creative ways to teach writing and to design lessons that will attract the attention of a large number of students.

INTEGRATING YOUNG ADULT LITERATURE INTO THE ENGLISH CURRICULUM

B. Joyce Stallworth, The University of Alabama

This study explored the process of integrating quality young adult books into the curriculum of three English teachers in West Alabama. A survey was administered to 100 students enrolled in the participating teachers' classes. The purpose of the survey was to determine the reading attitudes and preferences of the young adults in order to: (1) develop a list of quality, contemporary, young adult novels based on the students' interests, and (2) develop reader-response activities and strategies for students as they responded to, experienced, and shared these books.

Students were first asked to respond to questions concerning their attitudes toward reading using a Likert-type scale. Based on the scale, a negative or positive attitude toward reading was determined for each student individually, then by grade level and gender. A significant number of the students held positive attitudes toward reading. Second, students were asked to grade 20 general reading categories including sports, medicine, history, adventure, and science fiction. Students consistently graded certain categories very high and others very low. Finally, based on what the students reported, the researcher developed a reading list and specific activities for the teachers participating in the study. The study included reports from the teachers about their experiences while teaching the various books in their classrooms. Sample books and activities were included.

4:00 p.m.-4:50 p.m. **STATISTICS (Discussion Session)..................................Missouri**

PRESIDER: Malenna A. Sumrall, TheUniversity of Alabama

PSEUDO-CHANCE PARAMETER AND ABILITY LEVEL

Jwa K. Kim, Middle Tennessee State University

The purpose of this computer simulation study was to investigate the effect of pseudo-chance parameter (cj) on ability estimation (bias and standard error) in conjunction with different levels of ability of examinees. The three parameter logistic (3-PL) model in item response theory was applied to all 12 test situations resulting from the combination of four pseudo-chance parameter values (c = .20, .25, .33, and .50) and three levels of ability (Low, Medium, and High). Twenty-one true ability points were set from the Gauss distribution for each test situation, and 1,000 hypothetical subjects were generated for each true ability point from a uniform distribution. Conditional mean and standard error were computed at each point of true ability for each test situation.

The results showed that pseudo-chance parameter and ability level were significant factors on the linear combination of bias and standard error of ability estimation, F(6, 142) = 3.98, p = .001 (Wilks' lambda = .73), and F(4, 142) = 25.40, p = .0001 (Wilks' lambda = .34), respectively. There was no significant interaction effect between the two factors. Ability level was a significant factor for both bias and standard error. However, pseudo-chance parameter was significant only on standard error not on bias. The results were interpreted in conjunction with previous findings.

THE DEVELOPMENT AND PSYCHOMETRIC ANALYSIS OF THE SCALE OF TEACHERS' ATTITUDES TOWARD INCLUSION (STATIC)

H. Keith Cochran, Missouri Southern State College

The purpose of this study was to develop a psychometrically sound instrument to measure teachers' attitudes toward students with special needs. The Scale of Teachers' Attitudes Toward Inclusion (STATIC) was developed to examine differences in teachers' attitudes toward students with special needs and to identify the relationship between teachers' attitudes toward inclusion and their attitudes toward disabled persons in general. Approximately 1440 inservice teachers were asked to complete the STATIC; a sub-population of 850 teachers was randomly selected to complete The Scale of Attitudes Toward Disabled Persons (SADP). Responding were 516 teachers from five school districts in Alabama; 254 returned both instruments. Data analysis included preliminary analyses for item homogeneity, Rasch model IRT studies, factor analyses, analyses of variance, and regression analyses.

Reliability and validity studies suggested that it is possible to measure teachers' attitudes toward inclusion as defined by the STATIC. Factor analyses identified four subscales: advantages and disadvantages, professional issues, philosophical issues, and logistical concerns. Special education teachers scored higher on the STATIC than regular education teachers, and elementary teachers scored higher than secondary teachers. Higher scores on the STATIC indicated more optimistic or positive attitudes toward inclusion. Robust relationships were found between the STATIC and its factors with the SADP. The total score from the STATIC was the greatest predictor of scores on the SADP while advantages and disadvantages and philosophical issues were also found to be significant predictors.

The implication is that attitude toward inclusion, to some degree, is a reflection of attitude toward disabled persons in general. Other implications from this large scale analysis were the use of the STATIC to: (1) examine effects of teachers' attitudes on performance of special education students, (2) guide placement decisions, (3) screen prospective teachers, (4) shape teacher education programs, and (5) diagnostically focus remediation on specific dimensions of attitude.

NEURAL NETWORK APPLICATIONS FOR THE BEHAVIORAL SCIENCES

Regina Halpin, Mark Halpin, and William Smith, III,
Mississippi State University

The purpose of this paper was to provide an overview of the applicability of neural network systems for analyzing data associated with behavioral science research. The major characteristics of neural network systems were presented. Specifically, the following questions were addressed in this paper: (1) Why would a neural network be beneficial for educational research? (2) What data requirements are needed to use neural networks? (3) How are neural networks superior to conventional multiple regression methods? (4) What type of results are produced by neural networks? and (5) How do neural network systems work?

The neural network systems were defined as mathematical relationships that have been given their "intelligence" or "knowledge" from observed data. These artificial intelligent systems have been used for many applications in technical fields such as engineering and mathematics and have been found to be superior to commonly used statistical procedures (i.e. regression analysis). The applications of neural network systems for the behavioral sciences were investigated and summarized. The main justifications for using neural networks in educational research were their ability to "learn" relationships in complex data sets that typically contained many variables and to reduce the efforts involving factor analyses. Neural networks were characterized by two categories: (1) curve fitting and regression, and (2) pattern recognition and classification. The regression analyses often required some type of a priori knowledge of the general trends involved and the variables that influenced the trends. The training data came from either historical records and computer simulations, or from measured data. After training, the system was ready for other applications. The classification algorithms were designed to "adapt" to perceived correlations in input-output pairs based on a "rule." In general, neural network systems were capable of "learning" trends in a given data set and establishing input-output relationships based strictly on a test set of data.

MSERA
26th Annual Meeting

Thursday, November 13, 1997

8:00 a.m.-8:50 a.m. **GRADUATE ISSUES (Discussion Session)...................... Arkansas**

Conversation with Gene V. Glass, Arizona State University

9:00 a.m.-9:50 a.m. **GRADUATE ISSUES (Training Session - 1 hour)...............Louisiana**

A DISSERTATION SURVIVAL KIT

Kathy Kramer Franklin, Gary D.
Chamberlin, Robert L. Kennedy,
and Angela Maynard Sewall,
University of Arkansas
at Little Rock

The purpose of this one-hour training session was to offer graduate students a basic "survival kit" for dissertation research. A panel of four faculty, to include one recent graduate, engaged students in a lively, and fun, discussion on four important components of dissertation research. The components discussed included: (1) strategies to survive the dissertation proposal phase, (2) suggestions for choosing between a quantitative or qualitative research design, (3) time management and life survival strategies during the dissertation process, and (4) strategies to help the students survive the dissertation process without contemplating serious harm to their dissertation chair or committee, or both. All four members of the panel offered graduate students insight on the dissertation process from both the perspective of a former graduate student and current dissertation committee member.

During the first 40 minutes of the session, each member of the panel presented information on one of the four components mentioned and engaged graduate students in a dialogue on each topic. The remaining 10 minutes of the session were reserved to allow free-flowing discussion from students addressing their individual concerns about dissertation research.

Whereas this training session was designed specifically for graduate students, all former graduate students and current dissertation committee members were encouraged to attend and join in the discussion. A dissertation survival kit was distributed to all participants.

9:00 a.m.-9:50 a.m. **ACCULTURATION (Discussion Session)........................Ridgelake**

PRESIDER: Nola J. Christenberry, Arkansas State University

SELF-PERCEPTION: A PROFILE FOR ARAB AMERICAN YOUTH

Anisa Al-Khatab, Eastern Kentucky University

The purpose of this study was to provide a profile for Arab American youths in the mainstream of the American school environment.

Measures of the youths' perceptions of self-adequacy and judgments of competence were obtained from a sample of 256 Arab American youths in three different cities (Detroit, Michigan; Lexington, Kentucky; and San Diego, California). Susan Harter's revised "Self-Perception Profile for Children" was used to obtain the youths' perceptions of self adequacy and judgments of competence.

Self adequacy and judgment of competence were measured along six separate subscales. Five of them tapped the following specific domains: (1) scholastic competence, (2) social acceptance, (3) athletic competence, (4) physical appearance, and (5) behavioral conduct. The sixth subscale tapped into the sense of global self-worth.

One-way ANOVAS and chi-square goodness-of-fit tests were used to explore subscale and demographic differences. Preliminary results of the subscale means and standard deviation presented by grade and gender showed that boys saw themselves as significantly more athletically competent than girls did. In contrast, girls saw themselves as better behaved than boys did. Those results also indicated gender effects favoring boys for both physical appearance and global self-worth. Grade effects that showed scores on Scholastic Competence and Global Self-worth decreased with grade level.

THE EXPERIENCE OF NON-NATIVE ENGLISH-SPEAKING STUDENTS IN ACADEMIC LIBRARIES IN THE UNITED STATES

Qun G. Jiao, Baruch College, City University of New York; Anthony
J. Onwuegbuzie, Valdosta State University; and Christine E.
Daley, University of Central Arkansas

A study was undertaken to compare native and non-native English-speaking university students with respect to how often they used the library and why, as well as to determine which group of students had the highest levels of library anxiety. Findings suggested that: (1) non-native English-speaking students visited the library more frequently than did native English speakers; (2) for both non-native and native English-speaking students, obtaining a book or an article for a course paper was the most common reason cited for using the library, followed by studying for a test; and (3) non-native English speakers had higher levels of library anxiety associated with "barriers with staff," "affective barriers," and "mechanical barriers," and lower levels of library anxiety associated with "knowledge of the library" than did native English speakers. A discriminant analysis revealed that the reasons for using the library that best distinguished these two populations of students were to study for a test, to study for a class project, to obtain a book or article for a paper, to search information about potential employers, to read books on reserve, to read current newspapers, and to read one's own textbook. The implications of these findings were discussed.

ACCULTURATION GAP AND RELATIONSHIP BETWEEN FIRST AND SECOND GENERATION CHINESE AMERICANS

Esther K. Leung, Eastern Kentucky University

It has been observed through clinical experience that there are frequent conflicts and communication problems between the first and second generation Chinese Americans, over and beyond what might be expected due to "generation gap." The investigator suspects that differential acculturation levels between the generations may have a role in this phenomenon. The parents in these new immigrant families tend to think, value, and act according to Chinese norms, whereas the children are more Americanized in their views, style and conduct, especially youngsters who have been socialized into mainstream American culture through years of public schooling.

The purpose of this study was to ascertain the above hypothesis by comparing Chinese American parents' frequent remarks and the second generation's opinion. Parents' comments were collected through consultation encounters. Youngsters' opinion was solicited through a questionnaire administered to 20 nine-to-sixteen-year old Chinese Americans in a medium-size town in the Mid-South. The 35-item questionnaire was modified from an instrument used with over 200 Korean youngsters in the west coast for similar research. Descriptive statistics were used for this study because of the small sample size, and to facilitate comparison with the Korean American research, in which responses were converted to percentages and rank-ordered.

The results of this investigation were very comparable to the Korean study. Specific analysis indicated that a significant number of second generation Chinese Americans reported relationship problems with their parents, which coincided with the areas of concern often expressed by parents to this investigator. All of these problematic areas can be linked to differential cultural perspectives and acculturation levels, suggesting that: (1) there is an acculturation gap between the first and second generation Chinese Americans, (2) the acculturation gap exacerbates normal generation gap, and (3) mediation is advisable to bridge the cultural gap between the generations.

9:00 a.m.-9:50 a.m. **COLLEGE STUDENTS (Discussion Session)...................... Players**

PRESIDER: Jerry B. Gee, Nicholls State University

USING DEMOGRAPHIC VARIABLES TO EXAMINE DIFFERENCES IN COLLEGE STUDENTS' QUALITY OF EFFORT

J. Dean May, Western Kentucky University

The purpose of this study was to examine how college students differed with regard to their quality of effort based on a variety of demographic variables. The College Student Experiences Questionnaire (CSEQ) was used to assess quality of effort and other variables, including a variety of demographic variables (age, sex, classification in college, current residence, grades, parental level of education, employment status, and hours spent studying per week. These demographic variables were used to examine their impact on 13 scales that assessed quality of effort across the college environment (library experiences; experiences with faculty; course learning; art, music, and theater; student union; athletic and recreation facilities; clubs and organizations; personal experiences; experiences in writing; student acquaintances; science; topics of conversation; and information in conversations). Results were obtained from a sample of 125 social work majors at a comprehensive university in the Mid-South area. A variety of descriptive and inferential statistics were used to explore similarities and differences in quality of effort levels across the various demographic variables. Analysis and examination of each variable's attributes and the resulting levels of effort provided opportunities for discussion and reviewing implications.

BLACK IDENTITY DEVELOPMENT AND AFRICAN AMERICAN ACCULTURATION AMONG STUDENTS AT A PREDOMINATELY WHITE INSTITUTION

Janeula M. Burt, Auburn University

The purpose of this study was to determine whether there was a significant relationship between Black Racial Identity Development as measured by Helms and Parham's (1991) Black Racial Identity Attitude Survey (RIAS-B) and Landrine and Klonoff's (1996) African American Acculturation Survey (AAAS). Subscales for AAAS and sum scores for the RIAS-B were obtained from a sample of 152 African American undergraduate students. The dependent variable in this study was the sum score of the Racial Identity measure with the independent measures of African American Acculturation being religious beliefs, traditional socialization, superstitions, health traditions, preference for things African American, racial attitudes, traditional family beliefs, and traditional food.

A multiple regression analysis of the Racial Identity sum score and the Acculturation subscales indicated that there was a significant ($p<.001$) relationship between variables. Five of the eight subscales were significantly correlated with the RIAS sum scores at an alpha level of .05. Approximately 16% of the variance in the sum scores of Black Racial Identity development scores was accounted for by the contribution of the African American Acculturation subscales. Among African American undergraduate college students at a predominately white institution, there was a significant relationship between the degree of acculturation and the level of Black Identity Development.

SPIRITUALITY AS A PREDICTOR OF DEPRESSION: A MULTICULTURAL PARADIGM

Hae-Seong Park and Doug Raynock, University of New Orleans

The purpose of this study was concerned with the relationship between spirituality and depressive symptoms of Korean Americans in the southeast United States. A sample of 95 subjects between the ages of 30 to 53 who had resided in the U.S. for 29 years or less completed a survey instrument that included measures of depression, spirituality, socioeconomic, and socio-demographic status.

The result of correlational analysis showed that depressive symptoms were related negatively to intrinsic religious orientation (i.e., spirituality) and positively to extrinsic religious orientation (i.e., religiosity). Approximately 40% of the variations of depression could be explained by only the variable of spirituality for this sample. Through a hierarchical strategy in the multiple regression, the changes in the impact of spirituality were examined as other factors were considered. In the final model spirituality, education level, marital status, and employment were selected with multiple regression determination of .83. Based on the findings, suggestions for multicultural counseling and future research were offered.

9:00 a.m.-9:50 a.m. **TEACHER EDUCATION (Discussion Session)................. Missouri**

PRESIDER: Kenneth Clawson, Eastern Kentucky University

A DEMOCRATIC APPROACH TO TECHNOLOGY PLANNING AND IMPLEMENTATION: SIMILARITIES FOUND IN ELEMENTARY AND HIGHER EDUCATION

Walter Davie, Marilyn Staffo, Michele Acker-Hocevar, and Julie Laible,
The University of Alabama

Two studies reported similarities found in elementary and higher education in regard to democratic approaches to technology planning and implementation. The first study investigated the infusion of technology through the development and incorporation of a technology plan at an elementary school. The second study examined the technology proficiency levels of a teacher education faculty in a higher education setting. Addressing the staff development needs for increased faculty technology use was found to be a major problem in both K-12 and higher education. Faculty faced rapid changes in technology and a lack of preparation in their own professional development. Compounding this problem was a lack of technology funding at the elementary and higher education levels.

The methods employed for both studies were grounded in action research, which included both formative and summative data collection. Data were collected by means of needs assessments, surveys, observations, checklists, and focus groups from teachers in one elementary school and a teacher education department at a small college. Checklists and surveys were developed from a visioning process and a review of the recent literature. An analysis of data collected at the elementary level revealed that through participatory decision making there was a heightened commitment to the school's technology plan. At the higher education level, findings suggested the need for faculty input regarding the design of a faculty development plan to meet the wide variability of technology proficiency. Overall, the results from both studies indicated that faculty need to be involved in decision making leading to the technology implementation process.

AN ANALYSIS OF THE FEEDBACK GIVEN TO STUDENT TEACHERS

Melina Vaughan and Linda T. Jones, Mississippi State University

Student teaching is the capstone experience of the teacher education program. This study analyzed the type and amount of feedback given to student teachers by their classroom supervisors. The sample was composed of two groups of student teachers: those who were supervised under the traditional triad model, and those under the supervision of a clinical instructor. In the triad model, the public school supervising teacher and the university supervisor both assess the performance of the student teacher during the internship. The clinical instructor program model is an alternative method of supervision that involves only the supervising teacher and the student teacher. The teachers participating in this model have received intensive training in the areas of coaching, observation, conferencing, and reflectivity. Upon completion of this training, these teachers became clinical instructors and assumed full responsibility for supervision of student teachers. The clinical instructors worked as a team to discuss the progress of their student teachers and informally evaluated other team member's student teachers.

Student teachers participating in both methods of supervision were required to submit a weekly progress and feedback report. Feedback included 29 items categorized under four headings: classroom management/organization, discipline, instruction, and student participation. The student teacher noted whether the feedback received was constructive criticism or positive reinforcement. The report also identified the time spent receiving feedback and included three open-ended questions.

Both quantitative and qualitative methods were utilized in the analysis. Results indicated that the majority of feedback fell within the categories of classroom management/organization and instruction and was positive in nature, but more feedback was

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given in the clinical instructor model. This presentation provided a summary of the types and amount of feedback given to student teachers and responses to the open-ended questions.

THEORIES OF LEARNING: REFLECTIVE THOUGHT IN TEACHER EDUCATION

Sunya Collier, Georgia State University

The purpose of this study was to describe and analyze preservice teachers' reflections about how children learn, and, therefore, what teaching should look like in elementary school classrooms. This qualitative inquiry was grounded in preservice teachers' understanding of how practice and theory develop hand-in-hand.

Four elementary preservice teachers enrolled in a foundations of education course were selected using intensity case sampling. Only those who had experience with reflective thought in previous education courses were selected. The primary research method used was the interview. The specific types of interview included focus group interviews and open-ended individual interviews. The secondary collection tool was preservice teachers' written reflections.

Seven distinct themes emerged from a cross-case analysis. Three of the themes were indicative of preservice teachers' emerging theories about how children learn, and, therefore, what instruction should look like in the elementary classroom. Four supporting themes revealed the nature and value of preservice teachers' reflective thought throughout the study.

Conclusions from this study revealed the importance of dialogue, community, and reflection as essential and inseparable components for the development of self-knowledge, knowledge of how children learn, and the development of instructional strategy. In addition, preservice teachers' reflections illustrated that education for understanding is of primary importance in elementary education.

Several implications for teacher educators were made. These included the acknowledging of preservice teachers' incipient theories about how children learn; extending opportunities for multiple levels of social reflection; providing caring, trusting environments where preservice teachers feel "safe" discussing and critiquing their views; structuring opportunities for critical reflection using videotape as a reflective tool; and emphasizing the reciprocal relationship between theoretical course content and practical experience.

9:00 a.m.-9:50 a.m. **AT-RISK STUDENTS (Discussion Session)................Parlor 104/106**

PRESIDER: Vicki A. Wilson, Muskingum College

EFFECTS OF TUTORING FOR AT-RISK STUDENTS IN A LOCAL SCHOOL SYSTEM ON READING AND MATH OUTCOMES

Dennis C. Zuelke and J. Gordon Nelson,
Jacksonville State University

The purpose of this study was to ascertain whether benefits were realized to 290 at–risk students, grades 3–12, participating in after school tutoring in a northeastern Alabama school system. Data were obtained from school records and included: scores from standardized math and reading tests, GPA for math and reading at the end of the study, and GPA gain in reading and math during the course of the study. The determinant or independent variables were: type of tutoring program, type of tutor used, number of hours spent tutoring, overall cost, and cost per tutored hour. These data were statistically correlated to find relationships between the tutoring related variables and GPA in math and reading and standardized test scores in math and reading.

Results of the study showed that the tutoring had minimal effects on GPA regardless of the type of program, amount of money spent, or the type of tutors used. These results showed that the current plan of action for this tutoring program was ineffective. Recommendations included the following: increasing monetary resources, establishing and improving tutor–tutee relationships, reducing the tutor–tutee ratio by using computers as "tutors" guided by the actual tutors, and using a coordinator to assure that time is used effectively and to assist in tutoring strategies.

AN UNDERSTANDING OF THE ROLE OF SOCIOCULTURAL LEARNING: USING THE PAST TO MAXIMIZE THE POTENTIAL FOR FUTURE ACADEMIC SUCCESS

Beverly A. Wallace, The University of Alabama

Many people think that learning disabilities are genetic propensities that determine how and to what extent learning will occur for a student. In actuality, learning is a complex human activity that involves interactions between components found within the person and situations and circumstances found outside the person in her or his environment. One key component of learning is found in the experiences surrounding social interactions between, first, children and their caregivers and, then, students and their teachers. The purpose of this paper was to utilize current research in explaining these social antecedents that form profiles of potentially successful and non-successful learners of diverse abilities. Every student brings to the classroom a set of sociocultural experiences that have established a pattern of learning for the child. Vygotskian sociocultural theory provides an understanding of the social perspective of learning, and Ford provides a framework within which to describe the impact and consequence of experience on the human developing system. The presenter integrated both theories to help explain the precursors of various types of learners, as well as the necessary interventions that may be required to create an optimal environment which will foster self-regulated learning. With the focus on inclusive classrooms, now more than ever it is imperative for teachers to understand the interactions that have formed and continue to form the patterns of learning in their students. This presenter brought theory and practicality into focus by supplying guidance for instruction based in one essential component provided by sociocultural theory, taking into account the complexity of the learning experience.

CONCENTRATED LITERACY WITH AT-RISK ELEMENTARY SCHOOL CHILDREN: EFFECTS ON ACADEMIC PERFORMANCE AND SELF-ESTEEM

Elizabeth E. LaVergne-Pinkett, University of Southwestern Louisiana

The purpose of the study was to examine the effects of a concentrated literacy emphasis on the academic performance and self-esteem of at-risk elementary school children. Participants consisted of all first through sixth graders at two comparable elementary schools where 90% of the children received free lunch. Participants at one school served as the experimental group, and participants at the other school served as the control group. Concentrated literacy included emphasis on free and crafted writing, reader response activities, and purposeful vocabulary development. Academic achievement measures were administered to participants in April 1996 and April 1997. Self-esteem measures were administered in April 1997.

Multivariate analyses indicated that self-esteem, reading, and math scores were higher for participants in the experimental group than for participants in the control group. There were no significant differences in the other subject areas. A series of multiple regression analyses was computed to determine the presence and degree of any predictive relationships between the variables of interest.

Findings indicated significant positive relationships for participants in the experimental group. There were no meaningful relationships indicated for participants in the control group. Findings suggested that a strong emphasis on advanced literacy competency had a positive effect on academic performance and self-esteem in at-risk children.

10:00 a.m.-10:50 a.m. TEACHER EDUCATION
(Training Session - 1 hour)..Louisiana

USING VIDEO CASE STUDIES IN TEACHER EDUCATION

Clifford A. Hofwolt and Linda Barron, Vanderbilt University

Most recommendations for reform in teacher education stress the importance of providing preservice teachers with research-based information about effective teaching and learning; yet, novice teachers lack the experience-based context that makes this information meaningful and accessible when they are faced with real classroom situations that require it. Traditionally, teacher educators have attempted to provide this context by sending students to observe in classrooms or by asking them to watch videotapes of real and simulated lessons. But it has been suggested that when novice teachers observe real classes, they fail to notice--or misinterpret--many of the signals or cues that experienced teachers use to "make sense" of the instructional environment.

New developments in videodisc, CD-ROMs, and computer technologies make it possible to combine traditional text-based information about teaching and learning with real class incidents to create information rich "cases" for prospective teachers to analyze. This allows prospective teachers to develop the ability to analyze teaching episodes from multiple perspectives, to learn the signals or cues that experienced teachers use, and to "make sense" of the instructional environment.

In this training session, various uses of these video case studies were demonstrated from instructor generated presentations to student-oriented materials that are interactive in nature. Various video discs and CD-ROMs that have been developed for use with prospective teachers were demonstrated. The hypermedia technology that was demonstrated has the potential for creating a new type of teacher education program--one that moves traditional college and university courses away from a teacher-directed lecture format and into a problem-solving/analytical mode.

10:00 a.m.-10:50 a.m. LEARNING STYLES (Symposium Session).....................Arkansas

LISTENING TO OUR STUDENTS: ANALYZING STUDENTS NARRATIVES

ORGANIZER: Amany I. Saleh, Arkansas State University

An Overview

Amany I. Saleh, Arkansas State University

Recent research stresses the value of listening to our students' voices. Listening to our students means paying attention to students' interpretations of their world, experiences, and realities. The symposium included a collection of papers that explored relationships between students and teachers by examining students' verbatim narratives.

Metaphorically Speaking: Teacher Role, Control, and Affinity-Seeking Behaviors

Rebecca Oxford, The University of Alabama, and
Cassandra Elmore, Athens State University

This presentation explored teacher roles, controls, and affinity-seeking behaviors in the classroom. Teacher roles refer to the classroom-based social behaviors of teachers. Teacher controls refer to the mechanism by which teachers gain, share, or release power. Teacher affinity-seeking behaviors are strategies teachers use to encourage students to like them or feel positively toward them. The presenters analyzed the teacher roles, controls, and affinity-seeking behaviors found in a variety of student narratives, and they identified metaphors that best described the teacher in each narrative. Within each metaphor lies a basic, often unexpressed belief, about teaching and learning. The presenters shined a light on these beliefs, thus helping teachers and students better understand classroom dynamics.

Students' Perceptions of Good Teaching

Ana Barcelos, The University of Alabama

How do students believe teachers should teach? How do they interpret the roles and behaviors of their teachers? This study addressed these questions through interpretive analysis of high school students' narratives about their conflicts with their teachers. By exploring a theoretical framework about the nature of teaching and students' perceptions of good teaching, the results indicated that students expected teachers to be aware of the importance of (1) discipline in the classroom, (2) the variety of activities, and (3) respect for their students' opinions.

Students' Cognitive Interpretations of Classroom Dynamics

Amany I. Saleh, Arkansas State University

Emotion and cognition are inextricably linked. Research contends that emotional states involve cognition processes such as attention, perception, memory, concept formation, language, and problem solving. In this paper, the author examined learners' emotional reactions to style conflicts as they were expressed in their written narratives. The author also explored students' perceptions of style conflicts and achievements as influenced by classroom dynamics.

10:00 a.m.-10:50 a.m. STATISTICS (Discussion Session)...............................Ridgelake

PRESIDER : David T. Morse, Mississippi State University

MEASUREMENT INVARIANCE: USING CONFIRMATORY FACTOR ANALYSIS

Leanne Whiteside-Mansell, University of Arkansas at Little Rock

It is common for researchers to use the same measures on two or more groups, then draw inferences about differences or relationships between or among those groups based on results from the study. This practice makes the assumption that the instrument is measuring the same constructs in the groups being compared. The validity of this assumption can be examined by studying the measurement invariance of an instrument (i.e., the robustness of an instrument from one population to another). The question of measurement invariance of an instrument across groups concerns whether the instrument yields measures of the same attribute in all groups. There are multiple ways in which to provide evidence of measurement invariance. One strong test of measurement invariance is factorial invariance. Factorial invariance addresses the question of how similar the factor structures of the instrument are both within groups across time and between groups. The most accepted method of the analysis of factorial invariance involves the use of multiple group confirmatory factor analysis.

This paper briefly discussed the situations that called for the verification of measurement invariance and provided examples to illustrate the use of confirmatory factor analysis in the investigation of factorial invariance.

A COMPARISON OF TYPE I ERROR RATES OF ALPHA-MAX WITH ESTABLISHED MULTIPLE COMPARISON PROCEDURES

J. Jackson Barnette, Independent Consultant, and James E. McLean,
The University of Alabama at Birmingham

At the 1996 MSERA Annual Meeting, two researchers proposed a method of controlling Type I error in pairwise multiple comparisons after a significant omnibus F test. This procedure, called Alpha-Max, is a sequential cumulative probability accounting procedure based on the Bonferroni inequality. They demonstrated that Alpha-Max, in general, detected more pairwise differences than Tukey's HSD, but fewer than the Student-Newman-Keuls (SNK). A missing element in the discussion of Alpha-Max was the empirical determination of actual probabilities of Type I errors. This paper compared the Type I error rates of Alpha-Max compared with five other commonly used multiple comparison procedures: Fisher's LSD, Dunn-Bonferroni, Tukey's HSD, SNK, and the Scheffe' approach, as applied to pairwise differences. Based on a program written by the senior author, Monte Carlo procedures were used to generate 10,000 replications, sampling from a unit normal population, in every combination of three factors: (1) alpha of .05 and .01; (2) number of groups of 3, 4, and 5; and (3) sample sizes of 5, 20, 35, and 50. Actual Type I error rates were determined at each step from highest range down to adjacent mean differences. These rates, in addition to total number of Type I errors, were compared using a two-way design of the multiple comparison procedure crossed with sample sizes. This analysis was conducted within each combination of alpha and number of groups. Preliminary results indicated that Alpha-Max has more conservative Type I error control compared with LSD but more liberal control compared with Dunn-Bonferroni, Scheffe', HSD and SNK. Suggestions were made for further study of Alpha-Max when sample sizes and/or variances differ or when samples are generated from non-normal populations.

SUBSCALE RELIABILITIES OF THE SCHOOL PARTICIPANT EMPOWERMENT SCALE: COMPARING CRONBACH'S COEFFICIENT ALPHA AND FACETS (ITEM RESPONSE THEORY) ANALYSES

Beverly Klecker, Eastern Kentucky University

The purpose of this study was to compare the subscale stability and reliability measures provided by two analyses: Cronbach's coefficient alpha (Classical Test Theory), and FACETS (Item Response Theory). Although the theories and computations differ greatly, analyses by each of these methods provide a reliability coefficient and a description of the contribution of items to subscales or item "fit." The question that drove the inquiry was: How similar is the subscale information obtained from the two analyses? The School Participant Empowerment Scale was mailed to 10,544 teachers in 307 restructuring schools using standard survey methodology. Returns were received from 4,091 (38%) teachers within 183 schools. Data were hand-entered into an IBM mainframe computer and analyzed using SAS. ANOVAs were used to compare differences in instrument responses by within-school response rates. No statistically significant differences ($p<.001$) were found between groups, and the data were aggregated for the scale analysis. Both confirmatory and exploratory factor analyses were used to develop stable subscales with the large data set. Cronbach's coefficient alpha Reliabilities were calculated for each of the six subscales using SAS. Data were prepared for FACETS analysis on the mainframe, then downloaded and analyzed on an IBM PC with FACETS software. Despite differences in theory, the results of the two analyses were very similar. Items identified by Cronbach's alpha analysis as contributing the least to the overall subscale reliabilities were identified by the FACETS analysis as items with fit statistics furthest from unity. Redundancy of items within subscales was identified by both analyses. Reliability coefficients calculated by FACETS were higher than those from Cronbach's coefficient alpha. Both of the analyses indicated that the new subscales were stable, each item contributed to the subscale reliability, and the reliability coefficients were acceptable.

10:00 a.m.-10:50 a.m. **PARENT INVOLVEMENT**
(Discussion Session)..Players

PRESIDER: Rebecca McMahon, University of Scranton

THE IDENTIFICATION OF MALADAPTIVE COPING STRATEGIES EXHIBITED BY ELEMENTARY SCHOOL STUDENTS RAISED IN SINGLE CARE-GIVER HOMES

Melanie S. Adams and Patrick Kariuki, Milligan College

The purpose of this study was to determine the various coping strategies used by elementary school students residing with a single or dual care-giver in the home. Single Care-Givers consisted of only one adult living in the home with the child, while Dual Care-Givers consisted of at least two adults in the home with the child. Measures of anxiety, attention, aggression, externalization, and internalization were obtained from a sample of 30 students in the fourth, fifth, and sixth grades. The "Child Behavior Checklist" developed by the Child Study Center, University of Vermont, was used to determine these behaviors. The checklists were compiled for 15 students living with a single care-giver, and 15 students living with dual care-givers.

Measures of central tendency, measures of dispersion, ANOVA, and t-tests for independent means were used to analyze the data. Significant differences were found in the areas of attention, aggression, and externalization of behaviors. No significant differences were found in internalization and anxiety behaviors.

FAMILY CONFIGURATIONS AND INCOMES, PARENT-CHILD INTERACTIONS, AND STUDENTS' SCHOOL PERFORMANCE

Jupian J. Leung, University of Wisconsin-Oshkosh,
and J. Gordon Nelson, Jacksonville State University

The purpose of this study was to examine, through the perception of students, the effects of family configurations (intact, single-mother.....) and family incomes on parent-child interactions and students' school performance.

A cluster sample of seventh-, ninth-, and eleventh-grade students (N=752) from an east central region of Wisconsin responded anonymously to a questionnaire developed by the first author.

Results from factor analysis, reliability analysis and correlational analysis showed adequate validity and reliability of the scales. Multivariate and univariate analysis of variance showed that students from intact families reported greater verbal interactions between parent and child, greater parental expectations for academic achievement, more positive parent-child relationships, greater parental concern and support for schoolwork, and higher academic achievement than students from non-intact families.

The results also showed that students from higher income homes reported greater verbal interactions between parent and child, greater parental expectations for academic achievement, more positive parent-child relationships, greater parental valuing of schoolwork, greater parental concern and support for schoolwork, and greater parental help with schoolwork than students from lower income families. These results showed that both family configurations and family incomes are important factors that may be used to predict parent-child interactions at home.

One implication from these findings was that parents from non-intact or low income homes be made aware of the possible effects of family structures and family incomes on parent-child interactions and student achievement. Another implication was that social and community support should be made available to these parents to promote more positive parent-child interactions and children's school achievement. A further implication was that teachers may need to show special concern and/or emotional and social support for students from non-intact or low income homes in their effort to bolster the academic achievement of these students.

PARENT-TEACHER INTERACTION FOR STUDENT SUCCESS

Kathy A. Hulley, The University of Mississippi, and Judith A. Thompson,
Bramlett (MS) Elementary School

The purpose of the study was to investigate what, if anything, was lacking in training teachers for the classroom. A brief questionnaire was given to 12 teachers with one or two years of teaching at Bramlett Elementary School in Oxford, Mississippi. The responses to the question, "If I had more/some training in ____________, I would have been better prepared for teaching," resulted in all respondents stating a need for parent-teacher conference training. A review of literature provided information to write a staff development program. Information by Harlan, Shalaway, and others provided the material.

The program was implemented in the Fall of 1997 at Bramlett Elementary School during teacher inservice training. The authors prepared a packet of information and designed activities involving the participants taking part in the staff development program. The "Parent-Teacher Interaction for Student Success" packet included printed material for each teacher covering effective strategies for conducting conferences and different scenarios planned for role playing by participants to reinforce the strategies presented during the training. First-year teachers and preservice teachers had expressed a specific interest in parent-teacher conference techniques, as well as had experienced teachers. The material was considered to be valuable to higher education faculties, directors, classroom teachers, and other educators. Feedback was obtained in order to evaluate the appropriateness and usefulness to the teachers.

10:00 a.m.-10:50 a.m. **COGNITION/LEARNING (Discussion Session)................Missouri**

PRESIDER: Daniel Fasko, Jr., Morehead State University

OPENING OF SCHEMES AND THE EXPRESSION OF KNOWLEDGE STRUCTURES IN THE CONSTRUCTION OF NOVELTY: A DEVELOPMENTAL STUDY OF BRAZILIAN AND AMERICAN CHILDREN

Eliane L. Figueiredo, Auburn University/CNPq, Brazil,
and Fermino F. Sisto, UNICAMP, Brazil

In this study, the evolution of the creative thought was examined.. Two different cultures were observed and analyzed. The data collected summed up to 400 subjects, and 200 interviews were conducted from each culture. Each age group (from four to 13 years old) was formed with 40 subjects. Each subject was studied individually. The section lasted no longer than 45 minutes per child.

The analyses showed that in both cultures there are subjacent mechanisms that lead to the observable production of ideas and novelties in the logical problem-solving action. It was verified that the subjects presented general characteristics that made their actions possible or impossible in the solution of the proposed problems. These mechanisms, because of the different constructions concretely exposed to the experimenter, occasioned the realization of groupings, called since then Levels I, II, and III. The careful observation of these groupings led to the understanding of what could be making possible or could be impeding the creation of novelty by the subject, how and why the openings occur, and how the pseudo necessities obstruct with the resistance of reality, the appearance of the openings of the schemes.

Creativity was studied concretely and therefore defined as the evolution of the creative thought itself. This evolution evidenced the equilibration happening in a process of problem solving. "To create" is equalized to "the practice of creation." Therefore, when the subject is creating a thought, he/she also learns how to think (creates and exercises the opening of schemes, maintains previous schemes, and creates new structures), demonstrating in this manner one of the facets of the construction of their intelligence.

CHILDREN'S OPERATIONAL LEVELS AND REASONING PATTERNS OF THE CONCEPTUALIZATION OF FORCE

Indranie Dharmadasa, Auburn University

The purpose of this study was to examine the children's operational levels and the reasoning patterns when they are engaged in a task-based problem of force. The modified version of Kamii and DeVries's (1993) pendulum task, which included possible variations of four variables, was used to obtain data from a sample of 67 third-grade children in two elementary schools in a southeastern state.

The verbal responses given to the task interview by the children were categorized into operational levels of reasoning along six dimensions: IA, IB, IIA, IIB, IIIA and IIIB given by Inhelder and Piaget (1958) and Piaget (1974). Descriptive statistics and qualitative research procedures were adopted to analyze children's operational levels. Microgenetic analysis was carried out to identify specific reasoning patterns related to the variables involved in force.

Four operational levels were identified in the children's reasoning patterns related to the concept of force. Qualitatively, children's reasoning varied within each operational level according to the understanding they had of each variable. Contradictions were seen between their task performance and their reasoning on the performed task. Children's reasoning showed some aspects of logical reasoning but not all.

Results of the study suggested that identifying children's reasoning levels, specifically identifying reasoning patterns within levels, helped teachers when teaching abstract concept such as force. The finding that more than half of the children in the sample were in IB level related to the understanding of force is a remarkable factor that needs to be given considerable thought when teaching abstract concepts in third-grade classrooms.

EXAMINING THE FACTOR STRUCTURE OF A MEASURE OF LEARNING AND PERFORMANCE GOAL ORIENTATIONS FOR OLDER HIGH SCHOOL STUDENTS

Kiri H. Dharmadasa, Jeffrey Gorrell, and Theresa M. Akey,
Auburn University

This study investigated whether the Goals Inventory validated by Roedel, Schraw and Plake (1994) with an undergraduate sample in an educational psychology course at a midwestern university would be suitable for measuring learning and performance goals held by older students in the high school.

The responses to the Goals Inventory were obtained from 185 students from eleventh-grade classes in three high schools in a southeastern state. The sample consisted of 113 female students and 72 male students. They included 134 Caucasians, 49 African Americans, one Hispanic, and one Asian American.

Item analysis indicated that some items on the scale did not demonstrate convergent and discriminant validity. Therefore, a maximum likelihood exploratory factor analysis with varimax rotation was conducted to assess the scale's structure for this sample. Results of the factor analysis yielded three factors that accounted for 38% of the common variance. The performance goal-oriented factor remained constant, but the learning goal-oriented factor was composed of two related factors, one reflecting hard work and the other reflecting challenge and perseverance.

The findings were not consistent with Roedel, Schraw and Plake (1994). Their results indicated two factors: a learning factor and a performance goal-oriented factor. The results from the current study indicated that the learning goal-oriented factor was more complex for high school students consisting of two dimensions: one reflecting hard work and one reflecting challenge and perseverance.

10:00 a.m.-10:50 a.m. SCHOOL IMPROVEMENT (Discussion Session)..........Parlor 104/106

PRESIDER: Cynthia M. Gettys, The University of Tennessee at Chattanooga

WHAT DIFFERENCE DID IT MAKE? AN EXPLORATORY FOLLOW-UP STUDY OF PARTICIPANTS IN AN OUTWARD BOUND COURSE FOR EDUCATORS

Marty Alberg, The University of Memphis

Expeditionary Learning Outward Bound (ELOB) is one of seven school restructuring designs supported by the New American Schools Development Corporation. A sister group to the Harvard/Outward Bound Project, ELOB seeks to use Outward Bound principles stressing the value of transformative experiences of physical challenge and service to fundamentally change schools. Professional development experiences associated with the design include Outward Bound educators' courses in which school teams experience expeditionary learning principles in a wilderness setting.

The author of this study participated in an Outward Bound sailing course for educators. Course participants were then surveyed to examine their perceptions of the course itself, relative to stated objectives, and to explore the application of knowledge, skills, and attitudes gained through the Outward Bound experience to the school setting. A mailed questionnaire was used to solicit both Likert-type and open-ended responses to items dealing with personal growth and interpersonal/relational growth. Follow-up data were collected by telephone interviews.

For school transformation to take place, insights acquired by adults in these wilderness courses need to be applied in school settings in ways that promote transfer to the student population. Although these Outward Bound course participants perceived personal growth in many areas targeted by Expeditionary Learning design principles, and described their experience in positive terms, this study revealed little evidence of specific changes in classroom practice, transfer of learning to others in the professional environment, or defined organizational learning resulting from individual growth or knowledge/skill acquisition. Further steps were recommended to enhance knowledge/skill transfer.

CONTEXTUAL CONTRASTS BETWEEN IMPROVING AND STABLE ELEMENTARY SCHOOLS IN LOUISIANA

John A. Freeman, The University of Alabama

The purpose of this study was to conduct a survey of schools identified as "improving" or "stable" in an effort to determine if contextual differences exist. It was intended to further the understanding of the variables that contribute to school change, as measured by a specific school effectiveness index.

A survey was developed and mailed to principals in 124 "improving" and 124 "stable" schools, with an overall rate of return of 68%. The survey gathered demographic data, and also utilized research-based questions related to the theory of change, as well as questions designed to contrast certain known characteristics of schools that are undergoing externally initiated school improvement. Because the data collected were diverse, the survey was divided into six dependent variable groups for analysis. Statistical analyses using ANOVA and MANOVA were conducted to determine if statistically significant differences existed between improving schools and stable schools based on the principals' responses to the survey items.

The results of the analyses indicated that when the schools were grouped by change status, community type, and socioeconomic status, differences in perceptions of change and improvement practices in the schools varied significantly across multiple variables.

REFLECTION AND DIALOGUE AS A MEANS OF UNCOVERING THEORY AND IMPROVING PRACTICE

Cindy Hall, Baldwin County (AL) School System,
and Frances K. Kochan, Auburn University

Educational improvement has been an issue of critical import during the last decade. A major factor in addressing this issue has been how to connect the worlds of academia and K-12 schooling and strengthen the relationship of theory to practice. This research study sought to investigate the impact of dialogue and reflection as tools in dealing with this important factor.

The use of reflection in and on action as a means of improving one's practice has gained popularity in recent years. Given time constraints in teaching, it is difficult to get individual teachers to engage in this activity in a meaningful manner. This research study investigated the effect of reflection when coupled with observation, dialogue, and data collection. The researcher, a graduate student enrolled in a class on curriculum theory, worked with a classroom teacher to assist her in uncovering her beliefs about teaching and learning and the extent to which she implemented these beliefs in practice. Data collection techniques included classroom observations, review of documents, personal interviews, and student surveys.

This experience in collaborative action research impacted both the researcher and the teacher colleague. As the teacher became aware of her philosophical and theoretical beliefs, she was able to adapt her teaching techniques to more closely match these beliefs. Gaining information about student perceptions enabled her to better meet their needs. The researcher gained a clearer understanding of the complexities of teaching and deeper insights into her own theoretical framework.

The presenter shared the experience in dialogue and reflection and the impact of it on her professional development and on the practices of the teacher. Implications for connecting theory and practice through such endeavors were shared from the perspective of the researcher and from the professor who developed the assignment.

**10:00 a.m.-10:50 a.m. ELEMENTARY INSTRUCTION
(Display Session)......................................Tennessee Ballroom C**

EFFECTS OF SCIENCE MANIPULATIVE TRAINING ON CONTENT RETENTION BY TEACHERS AND IDENTIFICATION OF BEHAVIORS OF ELEMENTARY TEACHERS DURING SCIENCE INSTRUCTION

Edward L. Shaw, Jr., Lynda Frederick, and Pat Morris,
University of South Alabama

The purpose of the study was designed to determine the effects of hands-on science manipulative training on the immediate and long-term content retention by teachers and identify behaviors of elementary teachers during science instruction. Measures of retention were obtained from a sample of 45 fourth- and 45 fifth-grade teachers using a pretest, posttest, and delayed posttest. The treatment involved a two-day intensive, hands-on science manipulative workshop on "circuits" and "variables." Identification of teaching behaviors were described in a phenomenological qualitative study which began in the summer and continued throughout the following school year. Teacher interviews were conducted during the summer, with classroom observations throughout the school year, and a summative questionnaire administered at the conclusion of the study.

A series of t-tests was run on the quantitative data after the delayed posttest. The results had implications by planning future elementary, science teacher inservices, applications for grants, and content in science education courses at the university level.

EFFECTS OF MATHEMATICS/SCIENCE CLUBS ON STUDENT ATTITUDES: AN EVALUATION

Judy L. Giesen, The University of Alabama

This research project was designed to increase student interest, achievement, and self-confidence in science and mathematics by giving students the opportunity for in-depth exploration in these areas. One objective of the project was to organize Mathematics/Science Clubs in all public schools within one Alabama city school system.

Pilot Mathematics/Science Clubs were organized in six schools in order to pilot test the procedures, instruments and club activities. The subsequent research project included 72 schools. Surveys were developed to measure student interest and self-confidence in mathematics and science. Surveys used in the subsequent research project were revised based on the results of item analyses of the surveys used in the pilot study. Data from the pilot study were used to design club activities that were effective at increasing student interest and self-confidence in mathematics and science. Repeated measures analysis of variance results indicated significant increases in students' level of interest and self-confidence in mathematics and science across all grade levels. The results of the research project were explained in terms of the overall objectives and goals of the program.

The evaluation results were displayed on posters using tables, charts, and figures. Posters showed how the pilot study results were used to modify procedures, surveys, and club activities for the subsequent research project. Posters reflected the effectiveness of the clubs through displays of quantitative and qualitative results. An overview of the formative and summative evaluations of the research project were posted and session attendants were encouraged to note their own experiences with any of the research activities they have conducted. This process provided a useful exchange of ideas and practices.

USING LITERATURE FOCUS UNITS IN LANGUAGE ARTS INSTRUCTION: A FOCUS FOR ELEMENTARY TEACHERS

Susan T. Franks, Georgia Southern University,
and Nancy V. Miller, Mississippi State University

This display provided ideas to help inservice and preservice teachers use literature focus units as an instructional approach for teaching language arts. The display exhibited meaningful and functional activities for several outstanding trade books. Strategies were presented to assist teachers in helping their students become a community of readers. Activities were included for several components of the literature focus unit. The components were: student responses to literature, teacher mini-lessons that highlighted the language arts topics and concepts, and student projects that were extensions of the literature.

Literature focus units have been successfully used by preservice teachers. The units involve students in genuine language learning activities and provide teachers with a way of immersing students into literature.

USING QUALITATIVE ASSESSMENT TO DEVELOP INDIVIDUALIZED REMEDIAL READING PLANS

Gene Franks, Susan T. Franks, and Marty Moore,
Georgia Southern University

This display presented the results of a successful remedial reading program designed to meet the needs of a small group of students with varying levels of reading difficulties. The project was designed as a pilot study to guide the development of a program to service a larger number of students.

The project included four components. First, a detailed assessment was conducted using a variety of qualitative and quantitative tools. The center-piece assessment tool was the Qualitative Reading Inventory (QLI) by Lauren Leslie and Joanne Caldwell. This instrument provides a complete diagnostic profile of the reading disabled student. Comprehension is measured in two ways, through an analysis of the student's retelling and through the explicit and implicit comprehension questions. The QRI is also used to assess a reader's awareness and use of various metacognitive strategies for comprehending text. Additional information used in designing the instructional plan included interviews with the student and parent(s), observation, and other formal assessments (e.g., national standardized test, IQ test, personality inventories). Second, an individualized plan of instruction was designed around the needs of each student as revealed by an analysis of the assessments and past educational program. Third, individual instruction was provided to each student a minimum of one hour three days a week. Information was provided to each parent and student about additional reading activities the student was to undertake throughout the week. Fourth, a post-assessment was administered to each student using the QRI.

While this pilot project involved a small group of students (N=10) ranging in reading levels from primer to third-grade level, it provided valuable information to the reading specialists as they designed a program to meet a larger group of students. It also provided valuable information for the improvement of each student.

11:00 a.m.-12:50 a.m. COUNSELING (Training Session - 2 hours)......................Louisiana

WHAT SHALL WE DO? DEVELOPMENT AND IMPLEMENTATION OF A SCHOOL OR COMMUNITY CRISIS INTERVENTION TEAM

Camille B. Branton, Delta State University

In our world today, school children are being faced with death and violence on a regular basis. Unfortunately, most schools and communities are not prepared to meet a crisis until one occurs. Often, the crisis is overlooked, or attempts to intervene are limited by lack of knowledge. The development of a school or community policy to address protocol in the event of a crisis provides a plan that can be initiated immediately and effectively. Further, training teachers and volunteers to aid in carrying out the crisis intervention increases the number of individuals able to be served in a limited time. Procedures for identifying and serving those having immediate problems as a result of the crisis can help allay any complications or problems that may occur at a later date.

This training session was designed to provide counselors, administrators, teachers, and higher education faculty with the necessary information and skills for developing and implementing school, district, or community crisis intervention teams. Objectives for the session included an overview of the types of crises that may be faced, an outline for developing a crisis policy, a plan for quick and effective implementation of the plan, the recruitment of community and agency counseling resources to provide supplemental services, procedures for identifying individuals with specific needs, and training in a simple six-step crisis plan for dealing with large groups of individuals with limited resources. Group discussion and role play were utilized to ensure proficiency in the skills necessary for leading a crisis group. Participants were provided detailed guidelines for preparing a crisis policy and implementing a crisis intervention team.

11:00 a.m.-11:50 a.m. RESEARCH METHODOLOGY
(Symposium Session)...Arkansas

ACTION RESEARCH: A TOOL FOR PROFESSIONAL DEVELOPMENT AND CONSTRUCTING CHANGE IN SCHOOL-UNIVERSITY-STATE DEPARTMENT OF EDUCATION COLLABORATIONS

ORGANIZER: Carol Plata Etheridge, The University of Memphis

Overview

In the past, when school improvement was needed, "experts" spent a few hours or a weekend to teach teachers THE innovative technique/s that would improve their practice and the school. This was called professional development. Teachers in turn were left on their own to implement the innovation. At a later time a researcher appeared to collect data that were turned into a summative report casting success or failure of the innovation and, by association, the teachers. This strategy conjures a metaphor of school as gulag where teachers are powerless workers; university researchers are the hated white watchdogs; and university consultants are the resented final authority commandants.

The above approach neither resulted in professional development nor improved schools. Increasingly, professional development and school improvement initiatives are grounded on a new premise that change is manifested as outcomes of group deliberations about what matters--constructing meaning and knowledge together. "Sea change" is the metaphor used to describe this process, i.e., the sea moves in upon itself, shifting and adjusting, and moving forward. In school communities, activities such as vision building, critical inquiry, and reflection, developing organizational consciousness, and interpreting new information are believed to produce "sea change"--systemic change in self-organizing systems. Action research is practitioner research that can be used to help improve professional practices. It is research by individuals into their own practice.

In this session, action research was defined and examined as a viable scholarly research option. The use of action research in two collaborative projects to bring about "sea change" in Tennessee educational institutions was overviewed. Related professional development and school restructuring outcomes was summarized, and participants engaged in discussion about implications for teacher education, professional development, and university roles and rewards.

Four questions guided inquiry and organized the discussion of the papers: (1) What is the nature of action research, collaboration, and professional development that leads to whole systems undergoing systemic change? (2) How do teacher educator and school practitioner roles change if action research is used and "sea change" is to occur? (3) How is professional development restructured? (4) What are the implications for teacher education and professional development?

Action Research: Redefining Researcher and Practitioner Roles

Carol Plata Etheridge, The University of Memphis

Action research was compared to traditional research models, theoretical underpinnings presented, and uses summarized. Action research as applied in two collaborative projects were overviewed. The role of teacher educators and the issue of whether action research requires modification of university reward systems was examined.

Positive Attitudes in Tennessee Schools: Collaborating for School Improvement

Marty Alberg and George Etheridge, The University of Memphis

The structure of a longitudinal professional development and school restructuring collaboration and the role of action research was described. Results obtained from 100+ school leadership teams involved in planning and implementing school reforms were summarized and interpreted. Outcomes associated with using school-based information as a professional development tool to facilitate planning, implementing school plans, and building collaborations and networks were reported. Major issues addressed included those associated with trust, professional development, willingness to practice shared decision making, variations in expectations for school partnerships, and ownership.

Action Research as Part of Beginning Principal's Professional Development

E. Dean Butler, The University of Memphis

The structure of a longitudinal collaboration between two beginning principal cohorts, a state department of education, and university teacher educators using action research as a professional development tool to redefine and restructure professional development delivery and outcomes was described. Results obtained from teachers and principals in 40+ schools and nine professional development sessions were reported and interpreted. Changes in the nature of the Tennessee State Department of Education's professional development delivery were presented. Major issues addressed included those associated with trust, nature and use of data, professional development, willingness to practice shared decision making, and ownership.

Action Research: Implications for University Professorate

Paul Terry, The University of Memphis

Session information were interpreted emphasizing professors' changing roles in their relation to school practitioners and action research as a viable scholarly option. Discussion about implications of action research for university roles and rewards was encouraged.

11:00 a.m.-11:50 a.m. **SCIENCE EDUCATION (Discussion Session)................. Ridgelake**

PRESIDER: Ava F. Pugh, Northeast Louisiana University

PARTNERSHIPS BETWEEN ENGINEERING STUDENTS AND MIDDLE SCHOOLS: EFFECTS ON EFFICACY, ATTITUDE, AND LEARNING AMONG STUDENTS AND TEACHERS

E. Jean Newman, R. Burke Johnson, Sandra Van Eck,
and Brenda Litchfield, University of South Alabama

The purpose of the study was to determine the effects on engineering students, middle school teachers, and middle school students in a partnership between the university and middle schools. Over two quarters, teams of engineering students were paired with middle school math and science teachers. The teachers requested needed teaching aids such as modules, models, or manipulatives. The engineering students had eight weeks to plan, build/make, and present the modules. Teachers participated in a training seminar, wrote accompanying lesson plans and pretests and posttests, and implemented the modules.

With 42 engineering students and 12 pairs of middle school teachers, results were assessed in a pretest-posttest design, with ten weeks intervening. Results on the first half were promising. Using t-tests, teacher results were significant for learning in all areas of training (p=

.000 - .008). Similarly, t-tests for engineering students showed significant differences in attitudes toward community service, an increase in attitudes toward engineering (p=.054) and teaming (p=.055), and a change in study skills that was statistically significant. Other related factors were assessed.

The engineering students were beginning students; therefore, the attitude increase relative to community and engineering have strong implications about their success and service. The teachers showed favorable changes in learning, attitudes, and praise of the completed projects. Finally, with a small number (n=112) of the middle school students actually having been subjected to the intervention, the results were encouraging (pretest mean=41.4%, posttest mean=69.6%, t=14.79, p <.000).

The authors are convinced that the trends will continue if not increase. Implications for community service, teacher training, cooperative learning, and math and science manipulatives were discussed.

LINKING INSTRUCTION AND ASSESSMENT IN SCIENCE

Sandra K. Enger, The University of Alabama in Huntsville

The link between instruction in middle school science and assessment in ninth-grade science in a small, rural, midwestern school district was investigated. Nine hundred seventeen middle school (grades 6-8) science students and their 13 science teachers responded to surveys used to characterize science learning opportunities in the middle school science classes. This survey data provided a contextual framework for interpretation of ninth-grade student performance on a set of open-ended science questions. Three hundred nine ninth-grade students from the same district responded to this set of open-ended science questions developed from a standardized science test. The open-ended science questions included questions for which students were required to graph and interpret data, write conclusions, identify control variables, and judge the validity of information. These open-ended questions were scored by three raters according to a scoring rubric.

Middle school students reported having science learning opportunities to practice science inquiry, and their teachers reported that much of this practice was contextual. At least 90% of the ninth-grade students responding to the open-ended questions had been middle school students in the district and presumably would have had similar science experiences in their middle school years. While practice was reported in controlling variables and making predictions, student data from the open-ended science questions suggested minimal transfer of these skills. The interpretation and use of graphic data and actual graphing of data were areas that were problematic for the ninth-grade students. The ability to provide reasons in support of answers was also problematic across questions. Major recommendations based on both survey and open-ended question data included using a variety of contextual settings for framing science inquiry practice and more attention to discussing, reading, and writing in the content area.

THE INFLUENCES OF PHYSICAL SCIENCE PROBLEM-SOLVING ACTIVITIES IN TEACHER EDUCATION PROGRAMS

Burnette Wolf Hamil, Mississippi State University

The purpose of this study was to determine the effects of problem-solving activities in physical science classes designed for elementary education majors. A posttest only control group design was used for the study in which 50 students participated during a five-week treatment period. The experimental group performed problem-solving activities, whereas the control group did not participate in problem-solving activities. Data collection occurred at the end of the treatment period. Instrumentation consisted of the Test of Integrated Process Skills II and The Problem Solving Inventory.

Multiple linear regression was used in the analysis of the data. Significant differences between the experimental group and the control group were found. The process skill ability mean score was significantly higher for the experimental group. Significance was also found between the independent variable of logical reasoning ability as measured by the Test of Logical Thinking, and process skill ability as measured by the Test of Integrated Process Skills II.

Findings of the study supported the conclusion that preservice teachers needed more hands-on activities. The overlying implication of the study was that teacher education programs should provide problem-solving situations for their students.

11:00 a.m.-11:50 a.m. DISTANCE EDUCATION (Discussion Session)................... Players

PRESIDER: Denise Johnson, University of Central Arkansas

EXPERIENCING E-MAIL EVALUATION

Robert L. Kennedy, University of Arkansas at Little Rock

The purpose of the study was to compare electronic mail and more traditional "chalk and talk" approaches for teaching Diagnostic and Evaluative Procedures. The electronic course was first offered in the Fall of 1994 with the Spring of 1996 semester being the most recently included. There were 78 participants in the electronic classes and 65 in the traditional classes, primarily young white females in the senior year of the elementary education program. Multiple-choice pretests and posttests were given, similar in format to the regular tests administered to both groups for their course grades.

An analysis of covariance (ANCOVA) was run using posttest scores as the response variable and pretest scores as the covariate. Since the ANCOVA technique involves features of both the analysis of variance and regression, assumptions for both were tested using the NCSS statistical program, version 6.0.21. The assumption of random selection is not practical for most courses, but the two groups were demographically comparable. Normality and homoscedasticity across all groups were verified using the Omnibus Normality of Residuals and Modified-Levene Equal-Variance tests. Homogeneity of regression was observed in scatterplots of both pretests and posttests and their trend lines. Therefore, the assumptions required for ANCOVA seemed to be reasonably well met.

The test indicated that the null hypothesis of no statistically significant difference between the traditional (adjusted mean of 13.0, n=65) and electronic (adjusted mean of 13.5, n=78) classes' scores could not be rejected at the 0.05 level [F(1,140=1.37,(p=0.24)]. It was concluded, then, that offering the course through electronic mail did not appear to hinder the performance of the students, to the extent measured by the multiple-choice tests, suggesting that the electronic course offering provided a flexible alternative for learning, possibly with some nonacademic advantages over the traditional approach.

EFFECTS OF COMPRESSED VIDEO INSTRUCTION ON UNIVERSITY FACULTY AND STUDENTS

J. Gordon Nelson, Franklin King, and Stanley Easton,
Jacksonville State University

The purpose of this study was to examine the reactions and adaptability of faculty and students to a new teaching format, Compressed Video Instruction (CVI). CVI transmits in "real time" lectures and interactive discussions to several locations simultaneously. Students can respond to questions by pressing table control buttons activating video cameras. All sites can then see and hear students responding on TV screens.

Jacksonville State University (JSU) first implemented CVI for the Spring 1997 semester by offering four graduate courses on a Compressed Video Network that served four different locations. To evaluate the effectiveness of CVI, a 42-item questionnaire was developed. Of the 119 graduate students enrolled in the courses, 109 responded to the questionnaire.

The results indicated neither overwhelming praise nor criticism for the new CVI format. On one question, 13% of the students thought that the quality of instruction was "better," 11% thought the quality of instruction "worse," but the majority of students, 76%, perceived the quality of instruction as "about the same." With most students indicating a preference for discussion-oriented classes (70%) over lecture-oriented classes (30%), little negative effect was indicated over instructor concerns on pacing, instructor contact, effect on student participation (etc.). One of the selling points for CVI, convenience of travel and location, was validated,76% indicating that it as a major benefit for using the CVI format.

Implications of this study included the following: (1) survey results on several items, (2) a review of student and faculty concerns in establishing a CVI facility, (3) data for schools making decisions to use CVI, and (4) a contribution to the growing body of research on the use of technology in classrooms.

CONNECTEN: A PERSPECTIVE ON TEACHER TRAINING

Jack Maxwell, The University of Memphis

The purpose of the case study was to determine the types, amount, and availability of ConnecTEN-based Internet training programs and their impact on educators. The data analysis used 44 Internet Training Surveys, 36 follow-up teacher interviews, four elite interviews, and field notes from the participant-observer conducted for the 1996-97 school year. Issues and concerns were measured using a 16-question open-ended and Likert scale-based survey, a 13-open-ended-question teacher interview and a 20-open-ended-question elite interview. Supporting data included parent surveys, computer access surveys, material circulation counts, and a number of school self-studies.

The data were qualitatively analyzed with the cross-interview analysis technique being used to provide the analytical framework. A comparative examination of the data led to a clarification of the emerging themes and trends. The participant observer obtained data were inductively analyzed to provide additional focus to the emerging insights and interpretations.

The emerging consensus of themes and trends pointed to teachers' belief that not enough types and amount of Internet training was currently available in a form that they could effectively use. A deeper systemic concern that emerged was a questioning by the teachers of the school systems overall commitment to the use of Internet technology. The failure of individual schools and the school board to make training and follow-up training readily available on-site and on-the-clock led teachers to conclude that the value of Internet knowledge and usage was a relatively low priority of the educational administration.

11:00 a.m.-11:50 a.m. **TEACHER EDUCATION (Discussion Session)................. Missouri**

PRESIDER: Patricia Wachholz, Lane College

EDUCATING THE EFFECTIVE PRACTITIONER: IMPROVING THE PRESERVICE CURRICULUM

Janet Lynn Norton, Educational Consultant, Marietta, Georgia

The purpose of this study was to examine six preservice activities that may maximize growth in technical expertise, teaching artistry, and reflective thinking in beginning teachers. This study was part of a broader project involving 42 elementary school teachers. These 42 participants represented three very different undergraduate academic institutions as well as a variety of public school teaching assignments. Each participant was interviewed during the final month of her/his first year of teaching, and interviews highlighted issues of effective teaching, personal efficacy, and preservice and inservice professional development. This particular paper focused on preservice activities mentioned by these novice teachers, i.e., preservice activities related to their own professional development.

Specifically, participants suggested six preservice activities that, for them, were significantly ($p < .05$) related to growth in effective teaching. These activities provided: (1) opportunities to observe, practice, and refine creative thinking, (2) reflective thinking, and (3) an internal locus of control, all characteristics of their ideal effective practitioner.

These first-year veterans maintained: (1) weekly seminars for preservice teachers during full-time student teaching, (2) reflective journals, (3) clinical field experiences during foundations and methods courses, (4) microteaching lessons, (5) video analyses of student teaching performances, and (6) professor-modeled reflective thinking that would enhance the education of the effective practitioner. Hopefully, such information should assist teacher educators in implementing the principles of effective teaching and reflective practice in their preservice curricula.

A SECOND ANALYSIS OF THE PERCEPTIONS AND STRATEGIES OF TEACHERS AS REFLECTIVE PRACTITIONERS

Lynn Gillaspie, John Light, and Janice Myhan,
University of North Alabama

The purpose of this study was to determine if graduates of a teacher education program were using reflective practices in their classrooms and professional lives. Because the university knowledge–base was founded on a reflective model, faculty members wanted to examine how teachers perceived the importance and degree of usage of reflective practices on a day-to-day basis.

In 1995, data were obtained from 145 graduate students through the field testing of an instrument entitled Teacher Survey of Reflective Practices. Items were designed to assess information related to the following areas: identification of reflective practices, use of professional practices to modify teaching strategies, use of activities and behaviors to teach others, factors affecting reflective practices, and forces influencing teaching practices.

The results of this pilot study were analyzed via ANOVA to discern the degree of the actual use of reflective practices in contrast to whether such practices should be used in modifying classroom instruction. Fifty–one percent reported that they had received training in the use of reflective practice. Seventy–nine percent stated that the use of reflective practices was of "medium" to "high" importance in their current positions. There were significant differences between existing and desired reflective practices.

Two years later, this initial instrument was modified according to the responses from the previous study. Graduate students at our institution have once again been surveyed. It was anticipated that more of these students would report that they had received training in the use of reflective practice and were using these practices in their classrooms.

PRESERVICE TEACHERS' IDENTIFICATION OF DEVELOPMENTALLY APPROPRIATE PRACTICES: A PRELIMINARY STUDY

Dianne Lawler-Prince and David A. Saarnio, Arkansas State University

The purpose of this study was to examine preservice teachers' selections of developmentally appropriate and inappropriate practices. Practices to be selected were from the Developmentally Appropriate Practice Guidelines (Bredekamp, 1987). Forty-two statements were used, of which half were developmentally "inappropriate" practices (DIP) and half were "appropriate" practices (DAP) for kindergartners (four- and five year-olds). Preservice teachers (n = 68) participating in an undergraduate Early Childhood Education methodology course served as participants. A Q-sort technique was utilized, which required participants to select items on a continuum of "most" DAP and "most" DIP.

Participants' responses were tallied and examined using simple frequencies and binomial probabilities. Five DAP items were chosen by the students as one of the three "most appropriate" with the greatest frequency, all having probabilities of being chosen by chance of less than 1 in 1000 (and with one DAP item standing out far above the rest). Four DIP items were consistently selected as most "inappropriate." Errors also varied systematically.

The responses indicated preservice teachers' values regarding "most" DAP and DIP. The results suggested that there were some practices that were considered the "core" of developmentally appropriate practice, and some that were considered antithetical to developmentally appropriate practice. Many other practices fell somewhere in between.

Preservice teachers are understanding the nature of developmentally appropriate practices, but differentially categorize practices, which has meaningful implications for teacher training and subsequent teaching. For example, are those practices that stand out as most DAP or DIP to preservice teachers also those that we wish students to learn as most DAP or DIP? In the future, it will be important to examine, through observation, how beliefs about DAP identified by Q sort relate to teaching behaviors.

11:00 a.m.-11:50 a.m. **BLOCK SCHEDULING (Discussion Session)............... Parlor 104/106**

PRESIDER: Robert Calvery, Southside Public Schools (AR)

AN ASSESSMENT OF A FIRST-YEAR BLOCK SCHEDULING EXPERIENCE IN A LOCAL HIGH SCHOOL

Dennis C. Zuelke and J. Gordon Nelson,
Jacksonville State University

The problems examined in this study involved the first year implementation of block scheduling at a local high school in 1996-97. A team of College of Education-led researchers interviewed students and teachers, observed classrooms, and administered surveys during the year. The discussion emphasized the data collected and analyzed through twice-administered surveys.

Data were gathered from opinion surveys administered to all teachers and students and mailed to all parents in September 1996 and in April 1997. The majority of opinions in this study were affirmations of the block scheduling system mainly due to the lesser number of classes, the increase in time available in class to work, and the decreased amount of homework. Negative comments centered around the lack of variety in teaching methods and the lack of electives available. Comparisons of the item means between fall and spring opinion surveys using the same 23 items with a five-point Likert-type response scale per item indicated a high degree of agreement between students, teachers, and parents to the statements that students enjoyed having fewer classes per semester and the opportunity to complete courses within that semester. There was a high degree of disagreement from all three groups to the statements that there are fewer students in each class this year, more homework is completed outside of class, students are absent from class less often this year, and there are fewer class disruptions this year.

Recommendations on block scheduling practices at the high school included the following: block scheduling should continue, electives should be planned and implemented, dual course enrollment with the local university should be pursued, teachers should document use of three-to-five different activities per class, and the principal should ensure that this is carried out. In addition, the building leadership team should discuss issues that arise from block scheduling, and meetings with staff from other facilities who are working within a block system should be arranged to exchange ideas.

TEACHER AND STUDENT PERCEPTIONS OF BLOCK SCHEDULING PRACTICES IN TENNESSEE HIGH SCHOOLS

Michelle H. Barber and Dennie L. Smith,
The University of Memphis

The purpose of this study was to ascertain teacher and student perceptions of block scheduling practices in Tennessee high schools. The study used data collected from surveys to compare teacher and student perceptions focusing on the block scheduling issues of implementation involvement, teacher training, teaching methods, time utilization, successes and failures. The surveys consisted of 24 close-ended and four open-ended questions. Participants included 412 teachers and 802 students from 19 Tennessee high schools currently implementing a 4X4 block schedule or similar variation.

Data analysis consisted of t-test comparisons of the teacher and student means on each of the 24 block scheduling variables and summaries of the open-ended responses to block scheduling concerns and successes. The t-test comparisons of teacher and student means found statistically significant differences for all 24 variables except one. The five most statistically significant findings dealt with issues of implementation, involvement, teaching methodologies, administrative support, and class time usage. Major successes of the block schedule noted in the open-ended responses centered on the instructional flexibility provided by the longer instructional time blocks. Successes also included more electives, innovative teaching activities, less stress, and an improved climate. Major concerns centered on absenteeism and the difficulty of making up the time and work missed. Transfer students, attention span, and lack of teaching resources and methods were also mentioned.

It was clear from this study that teacher and student perceptions differed significantly on block scheduling practices and issues. Critical differences, such as absenteeism, teaching methodologies, attention given to students, and implementation involvement, must be confronted. It was clear that there were many areas for improvement, but teachers and students both agreed that it is an improvement over the traditional school schedule. This study reported these differences in teacher and student perceptions and presented possible reasons and resolutions for these differences.

AN ANALYSIS OF THE EFFECTIVENESS OF BLOCK SCHEDULING

Joe Wilson and Laura Stokes, University of North Alabama

The purpose of this study was to determine the effectiveness of block scheduling as perceived by teachers in the second year of block scheduling as opposed to those involved in block scheduling for the first year. The study also sought to determine relationships between subject areas and teachers' opinions of block scheduling. The most important factors a school should consider prior to initiating block scheduling were: to determine teachers' perceptions of major advantages/disadvantages of block scheduling, and to isolate the most critical elements in maintaining block scheduling as an effective curriculum alternative. The sample included 147 inservice teachers, including 73 from two schools in the first year of block scheduling, and 74 teachers from two schools in the second year of block scheduling. The survey was conducted during January 1997.

Using a Likert-type scale, the teachers overwhelmingly perceived block scheduling to be effective when compared to traditional scheduling. Chi-square was used in an attempt to determine the relationship between teachers' opinions and subject areas. Significant relationships did not appear to exist. Further, teachers perceived block scheduling to be effective in reducing discipline problems and increasing daily attendance. Several factors important to consider in initiating block scheduling; major advantages for students, teachers and instruction; and critical factors in maintaining block scheduling were also isolated based on the perceptions of the teacher.

11:00 a.m.-11:50 a.m. EXCEPTIONAL EDUCATION
(Display Session)......................................Tennessee Ballroom C

CHARTER SCHOOLS: A REVIEW OF LITERATURE AND AN ASSESSMENT OF PERCEPTION

Patricia Glascock, Mary Robertson, and Charles Coleman,
Arkansas State University

The concept of charter schools has been offered as a viable alternative to traditional public schools. Since the first charter school legislation in 1991, the number of charter schools has grown to over 200. Although the number of charter schools has grown, the concept is not without its opponents in the educational arena.

A comprehensive review of the literature on charter schools was conducted by the authors as part of a doctoral-seminar project. The perceptions held by superintendents in Northeast Arkansas in regard to the charter school concept, and the need for a charter school was assessed through the use of an informal qualitative phone survey. The data obtained from 12 participating superintendents were analyzed for major themes.

The results indicated that, overall, the superintendents had little factual knowledge about the charter school concept, with only one superintendent indicating that he had read any information. Several expressed concerns about the concept and the implications for their schools.

A Power Point computer display was utilized to share the results of the study, facts about the charter school concept, and sources for charter school information. Posters also were used to highlight information from this study.

SCHOOL PSYCHOLOGY CONTRACT SERVICES IN ARKANSAS: A SURVEY OF STATE SPECIAL EDUCATION SUPERVISORS AND SCHOOL PSYCHOLOGY SPECIALISTS

John D. Hall and Cynthia Gleghorn, Arkansas State University,
and Ronald K. Bramlett, University of Central Arkansas

The purpose of the study was to gain a current understanding of school psychology contract services in Arkansas. Seventy-four State Special Education Supervisors and 57 School Psychology Specialists responded to items composing two separate surveys.

Results obtained from Special Education Supervisors indicated that schools in Arkansas rely primarily on contract psychoeducational services. The following findings were of particular interest in regard to the practices of contract psychoeducational practitioners: 95% infrequently or never initially meet with the parent(s) to secure written consent or discuss the purpose and scope of the assessment; 71% seldom or never observed the student in the school; 81% infrequently or never interviewed the parent(s); 40% seldom or never interviewed the teacher; 53% infrequently or never provided additional services such as consultation, intervention, prevention, and inservice; 68% seldom or never attended eligibility meetings; and 59% infrequently or never signed the eligibility report.

Results obtained from School Psychology Specialists that were of particular interest included the following: 50% who had previously been employed as contract practitioners noted that they had infrequently or never been required to complete eligibility reports, and 29% indicated that they were seldom or never aware of the evaluation outcome. Overall, 64% noted that contract evaluations infrequently or never provided a complete evaluation, and 56% were seldom or never pleased with the results.

Collectively, these findings raise serious questions specific to the overall quality and appropriateness of school psychology contract services in Arkansas. A number of the practices do not appear to be consistent with the National Association of School Psychologists' Standards for the Provision of School Psychological Services and the Principles for Professional Ethics. Formal guidelines specific to contract services in Arkansas may be warranted.

PREVALENCE OF ATTENTION DEFICIT DISORDERS IN ARKANSAS

Harold Griffin and Christine E. Daley, University of Central Arkansas,
and Anthony J. Onwuegbuzie, Valdosta State University.

The purpose of this study was to determine the prevalence of attention deficit disorder among school children in Arkansas. The ADHD Survey was mailed to all 311 superintendents of school districts in the state of Arkansas. A total of 128 superintendents (41.1%) returned the survey. Findings revealed that 3% of students were diagnosed with ADD/ADHD, although, in some districts, as many as 25% of students were diagnosed as such. ADD evaluation scales were used by 33% of school districts to identify ADD/ADHD children, whereas a further 28.8% of districts used these scales in combination with intelligence tests. Sixty percent of school districts identified ADD/ADHD children by Grade 1, with 78.1% rendering a diagnosis by Grade 5. Ritalin was taken by ADD/ADHD students in all districts, while Adderall, Norpramin, and Catapres were used by students in approximately 90% of the districts. The administration of medications was supervised most often by principals (45.3%) and secretaries (32.0%). Behavior modification was the most used supplement to medication (62.0%). A combination of teacher and parents was the most common referral source (56.6%), with resource teachers (26.9%) and principals (21.0%) being the persons to whom ADD/ADHD children were most often referred. Medical evaluations were typically the first step in the evaluation process (52.1%). The implications of these findings were discussed.

12:00 p.m.-12:50 p.m. PRINCIPALS (Discussion Session)................................Ridgelake

PRESIDER: Angela Maynard Sewall, University of Arkansas at Little Rock

PRINCIPALSHIP PREPARATION PROGRAMS: THE PRINCIPAL'S PERSPECTIVE

Otis K. LoVette, Northeast Louisiana University

What graduate-level curriculum can best prepare school principals? This is a question that is being hotly debated by accrediting agencies, universities, professional organizations, and practitioners in the field. Practitioners often say that typical course requirements are not appropriate for preparing administrators for today's schools, and much of the content is too theoretical.

Louisiana is presently going through change in certification requirements, reverting back to generic, K-12, certification for principals, and discussions are presently underway regarding an appropriate program or programs for preparing and upgrading school principals. In keeping with the National Association of Secondary School Principals' steps for collaborative action (National Association of Secondary School Principals, 1992), which recommends that all stakeholders in such changes in preservice education should be involved in such planning, the researcher surveyed a sample of Louisiana principals to determine which graduate courses they believed would comprise the most effective principalship preparation curriculum.

A principal from each level (elementary, junior high, and high school) was randomly chosen from each parish and city system in the state. Survey forms were sent to 198 principals, and 102 responded. The survey used course titles that had been solicited from departments of educational administration and supervision in 58 colleges and universities. Tabulation of data revealed that there was considerable difference in the existing required curriculum for principal certification that the curriculum practitioners believed would comprise the most effective principalship preparation program. This tabulated data, along with similar material from superintendents and members of the Louisiana Council of Professors of Educational Administration, has been presented to the Louisiana State Department of Education officials for their consideration.

PREPARING FUTURE SCHOOL ADMINISTRATORS FOR PARENT INVOLVEMENT THROUGH ACTION RESEARCH

Linda T. Jones and Jack Blendinger,
Mississippi State University

This paper focused on the role that action research can serve in preparing future school administrators to involve families in their children's education. New national teacher and administrator education standards calling for competency in working with families and essential research findings on the benefits of parent involvement were also highlighted in the presentation.

Preparing future school administrators to work with families is seen as a continuum that moves from understanding the importance of the principal taking the lead in encouraging teachers and staff to reach out to families to developing skills necessary to put parent involvement into practice. As the prospective administrator travels the continuum, she/he moves from awareness to being an active participant in the process through field-based action research. To demonstrate their newly acquired knowledge, future administrators conduct parent involvement activities in an actual school setting and then study the effects of their action. Parent involvement activities include constructing newsletters, conducting workshops for parents, and implementing reading projects that require parent participation in the home.

Evaluations completed by preservice administrators and assessment of action research projects over a five-year period yielded positive results. Data were collected through an evaluation instrument using a five-point scale and open-ended questions. The paper included evaluation results and descriptions of sample projects so that participants could see how parent involvement activities were incorporated into the preparation program.

A STUDY OF ROLES AND RESPONSIBILITIES OF ASSISTANT SECONDARY SCHOOL PRINCIPALS

Rosie L. Thompson and Louise Jones,
Jackson State University

The purpose of this study was to examine the actual and ideal roles and responsibilities of assistant secondary school principals and to identify characteristics necessary for effective assistant secondary school principals as measured by the opinions of secondary principals and assistant secondary principals in Mississippi. This study was carried out through an analysis of data obtained by the dissemination and collection of a research instrument, Assistant Secondary School Principals (ASSP) Opinionnaire. It was distributed to a total of 516 secondary school principals and assistant secondary principals in the state.

Descriptive statistics were used to analyze data. The chi-square test of independence was used to determine the relationship between the responses of participants with respect to position and gender at the .05 level of significance. There were no significant differences found in the opinions of principals and assistant principals regarding the actual roles and responsibilities of assistant principals. They generally agreed that they were important. There were no significant differences found in the opinions of principals and assistant principals regarding the ideal roles of assistant principals. They viewed these roles from important to very important. Principals and assistant principals ranked judgment, ethical behaviors, leadership skills, dependability, commitment, credibility, loyalty, conflict resolution skills, and active listening skills as the most important professional, personal, and psycho-social characteristics necessary for effective assistant secondary school principals.

There were no significant relationships between secondary principals and assistant principals in Mississippi regarding their opinions of the actual nor the ideal roles and responsibilities of the assistant secondary school principal. There were no significant relationships between secondary principals and assistant secondary principals. These opinions were not significantly different when comparing them by gender. All of the null hypotheses were accepted. Further study is needed to include the opinions of teachers, parents, students, superintendents, the community, and school boards.

12:00 p.m.-12:50 p.m. **STATISTICS ANXIETY (Discussion Session)..................... Players**

PRESIDER: Beverly Klecker, Eastern Kentucky University

STATISTICS ANXIETY: A FUNCTION OF LEARNING STYLE?

Anthony J. Onwuegbuzie, Valdosta State University,
and Christine E. Daley, University of Central Arkansas

As the importance of research is being recognized increasingly, so more teachers are required to enroll in research methodology courses as a necessary part of their graduate degree program. Unfortunately, it appears that these courses are exceedingly difficult for many students.

To date, no research has been conducted regarding the relationship between learning styles and statistics anxiety. Thus, the purpose of this study was to investigate this relationship in a research methodology course, using a multivariate analysis. Participants were 82 graduate students (90.2% teachers). A canonical correlation analysis revealed that teachers who preferred to learn in informal classroom designs, who liked structure, who were authority-oriented learners, who required nutritious food breaks while learning, who preferred to undertake difficult tasks in the morning, and who required mobility in learning environments tended to have higher levels of statistics anxiety. Based on these findings, recommendations were made regarding effective teaching strategies for research methodology courses.

SUCCESS STORIES IN A GRADUATE INTRODUCTORY STATISTICS COURSE

Hae-Seong Park and Lisa M. Sullivan, University of New Orleans

The purpose of this study was to investigate the ways in which graduate students with statistics anxiety successfully completed their introductory statistics course. Research questions focused on the factors that assist the students in performing well in statistics. Data were collected using unstructured interviews and document analysis. The document analysis was based on the scores of class assignments and quizzes. Five students were selected for this study. These students began the course with a great deal of statistics anxiety but managed to complete the course with outstanding performance.

The results of the data analysis identified two categories of factors that aided the students in achieving success in statistics: the first was associated with the students, and the second related to the instructor. Factors in the first category included interaction with a study partner, course load, and discipline. In the second category, the factors were the instructor's conceptual approach, consistent and fair expectations from the instructor, and an easy-to-read textbook. Based on the findings, suggestions for future research were offered.

FACTORS RELATED TO ANXIETY IN STATISTICS

Vicki A. Wilson, Muskingum College

Anxiety about statistics can result in impaired performance, mental anguish, and avoidance of statistics courses needed for professional advancement. The purpose of this study was to examine the relationship of the anxiety felt by students in graduate statistics courses to their characteristics and to the teaching strategies used by their instructors to reduce anxiety in the statistics classroom.

Participants in the study were 178 students in graduate courses at the University of Southern Mississippi during the 1995-96 academic year. Multiple regression analysis revealed that 37% of the variability in the anxiety score on the Revised Mathematics Anxiety Rating Scale could be explained by the following variables: mathematics preparation, number of years since last mathematics course, perception of mathematical ability, proficiency in calculator use, computer anxiety, expected grade, department in which the course was taken, level of the course, major, age, gender, and teaching strategies for reducing anxiety in the statistics classroom, as measured by the Alleviating Statistics Anxiety Assessment. Independently, mathematics preparation, perception of mathematics ability, proficiency in calculator use, and gender were statistically significant predictors of statistics anxiety.

Although there was not a significant independent relationship between statistics anxiety and student perceptions of their instructors' use of anxiety-reducing strategies, students did report that their instructors used a great variety of strategies in an attempt to reduce anxiety.

Among these were allowing assignments to be redone, encouraging student questions, exhibiting patience and concern for understanding, using humor in the classroom, acknowledging student anxiety, and promoting cooperative learning.

12:00 p.m.-12:50 p.m. **PREDICTING ACHIEVEMENT**
(Discussion Session)..**Missouri**

PRESIDER: Charles W. Davidson, University of Southern Mississippi

PREDICTING ACADEMIC PERFORMANCE OF OPTOMETRY STUDENTS AT SOUTHERN COLLEGE OF OPTOMETRY

Amy Shelton and Jwa K. Kim, Middle Tennessee State University

This study attempted to determine which aspects of an applicant's entering profile were the most significant predictors of performance in Southern College of Optometry's (SCO) four-year Doctor of Optometry degree program. Gender differences on academic performance were also compared. The records of students who entered SCO in the years 1989-95 were utilized. Optometry school performance was based on first-year GPA, GPA at the end of two years, three-year cumulative performance, and cumulative four-year GPA.

A one-way multivariate analysis of variance (MANOVA) was performed to test the gender difference on the combination of SCO grade point average (SCOGPA), undergraduate grade point average (UGPA), Optometry Admissions Test academic average (OAT-AcAvg), and interview score (IntvSc). MANOVA indicated a significant difference between males and females on the linear combination of SCOGPA, UGPA, OAT-AcAvg, and IntvSc, $F(4, 293) = 5.85$, $p = .0002$ (Wilks Lambda = .926). A multiple regression showed that prerequisite GPA demonstrated a consistent tendency in predicting academic performance in all four years of optometry school. Several subtests of the OAT also enhanced the predictive validity obtained from prerequisite GPA.

THE IMPACT OF "LATE BIRTHDAYS" ON ACADEMIC PERFORMANCE: RESULTS FROM A STATEWIDE TEST

Fen C. Chou and Scott M. Norton, Louisiana State
Department of Education

The purpose of this study was to determine the relationships between students' age (as defined by birth month) and academic performance on a statewide criterion-referenced test. As a result of kindergarten entry-age discussions, this study was designed to: (1) compare academic performance of older and younger students born in a given year, and (2) to examine the differences in performance over time.

The study utilized data from one large urban district that had a December kindergarten entry cutoff date. The sample included a cohort of students born in 1984 who participated in the statewide test in 1992-93 (third grade), 1994-95 (fifth grade), and 1996-97 (seventh grade). Students were categorized into four age groups based on the quarter of the year in which they were born. Academic performance was measured through students' scaled scores on two subjects: language arts and mathematics.

To determine if any relationships existed, ANOVA tests ($p < .001$) were employed for the cohort of students at grades three, five, and seven. The results showed that there were significant relationships between age and academic performance at grades three and five, with older students outperforming younger students; also, the differences were greater at grade three than at grade five. The relationship between age and academic performance was not significant for the cohort of students at grade seven.

These results indicated that entry age may have some implications for younger students; however, age-related differences become less pronounced over time. The patterns of the relationships between age and academic performance were also examined across gender and ethnic subgroups. These results may provide some information to policy makers when discussing the issue of kindergarten entry cutoff dates.

AN EMPIRICAL STUDY OF STUDENT RELATIONSHIPS AND STUDENT ACADEMIC ACHIEVEMENT

Katherine E. Niebuhr, University of Montevallo,
and Robert E. Niebuhr, Auburn University

The purpose of the study was to determine the degree of association between student relationships and student academic achievement. Measures of student relationships and achievement were obtained from a sample of 241 ninth-grade high school students. Both student-peer relationships and student-teacher relationships were measured by a questionnaire, and student academic achievement was measured by grade-point average.

Correlational analysis was used to access the strength of relationship between the two perceived relationship variables and student achievement. Self-reported motivation was also examined as an intervening variable between perceived relationships and academic achievement.

Both student-peer and student-teacher relationships were positively correlated to student academic achievement, as measured by grade point average. The analysis did not indicate that motivation acted as a mediating variable for this group of subjects.

12:00 p.m.-12:50 p.m. WOMEN'S ISSUES (Discussion Session).........Tennessee Ballroom C

OPEN DISCUSSION OF PROFESSIONAL ISSUES PERTAINING TO WOMEN

Ann D. Chapman, Eastern Kentucky University

1:00 p.m.-2:50 p.m. RESEARCH METHODOLOGY
(Training Session - 2 hours)....................................... Louisiana

USING MONTE CARLO METHODS FOR METHODOLOGICAL RESEARCH

J. Jackson Barnette, Independent Consultant, and James E. McLean,
The University of Alabama at Birmingham

Monte Carlo methods are used to simulate real-world probability distributions for a wide variety of statistics under known, controlled conditions. This is useful when analytic and empirical methods are not feasible. Until recently, the use of Monte Carlo methods required extensive knowledge of mainframe programming. However, the availability of very powerful, fast microcomputers and user-friendly software has made it feasible and very manageable for more researchers to conduct such studies. The purpose of this training session was to share with researchers practical methods of conducting Monte Carlo studies. The training session included the following topics and demonstrations: overview of Monte Carlo methods (historical perspective, what can be done and what cannot be done, classic examples from the literature); considerations in setting up a Monte Carlo study (selecting distribution shapes and parameters, number of replications, analyzing Monte Carlo data); a demonstration using mainframe (SAS programming); and a demonstration using PC-based software. The participants left the session with an understanding of what Monte Carlo methods can do and how they can be implemented using microcomputers. Each participant who brought a DOS formatted disk obtained a copy of the compiled basic program used to generate data for Monte Carlo studies.

1:00 p.m.-1:50 p.m. EDUCATIONAL REFORM (Symposium Session)..............Arkansas

EDUCATIONAL IMPROVEMENT: UNDERSTANDING THE THEORY AND THE PRACTICE

ORGANIZER: Frances K. Kochan, Auburn University

Overview

When engaging in efforts to improve education, practitioners tend to focus on specific organizational, curricular, or instructional features. Theorists, however, deal with the broader issues of theory or philosophy. This leads some to suggest that the gap between theory and practice in education is a "grand canyon." The research studies presented in this symposium examined this topic by investigating the philosophical beliefs underlying educational programs and comparing them with the beliefs and practices of those who implemented them. Habermas' world views, technical, practical, emancipatory were used as the framework for the studies. The studies consisted of applied research methodologies using a qualitative approach. This included conducting content analyses of multiple data sources the formation of categories. The studies were conducted as part of a graduate class in curriculum theory. Results of the studies indicated that personal and contextual circumstances can hinder or facilitate individual capacity to implement teaching strategies consistent with philosophical beliefs.

The organizer presented an overview of the studies, the framework used, and the purposes addressed. The organizer also summarized the overall findings and implications.

Mission Impossible ?

Latanza Harrison, Opelika
(AL) Middle School

This study investigated the theoretical world views of individual teachers and their implementation of a reading curriculum. The researcher examined documents and conducted classroom observations and personal interviews. Results indicated that all teachers were able to implement their theoretical perspectives through the reading program. Factors that supported their efforts were identified.

Trying to Keep the Engine on Track

Shelly Dike, Auburn University

The researcher inquired into the espoused philosophy of a university professor and the methods he used in teaching his classes. A disparity was found between the two. Contextual and personal factors that prevented the instructor from teaching in the preferred manner were reported.

What We Do and What We Say

Barry Scott, Auburn University

This researcher was involved in reforming a university graduate class as part of a team of teacher/researchers. The researcher examined the underlying theoretical framework upon which the revised class was based, the world views of those designing and teaching it, and the actual way in which the class was taught. There was a discrepancy between the design of the class, the philosophies of those teaching it, and the way in which it was delivered. Structural and organizational factors appeared to be the greatest hindrance to implementing the desired changes.

Solving the Puzzle of Student Achievement

Mary Sue Polleys, Muscogee County (AL) Schools

This study investigated the factors that enabled a school with 42% of its student population on free and reduced lunch to excel and become among the top schools in the county on standardized test measures. The philosophical world view of the teachers and principal were examined and found to be consistent with one another. Factors in the climate and operations of the school that enabled them to implement their beliefs were uncovered.

Audience Participation

Following the presentations, the audience was given the opportunity to ask questions. They were also given the opportunity to examine their own world views through the use of a standardized instrument and a chance to reflect on the meaning of their responses.

1:00 p.m.-1:50 p.m. **READING (Discussion Session)................................... Ridgelake**

PRESIDER: Diane Green, Mississippi State University

MEASURING LITERACY GROWTH: A METHOD OF PROGRAM EVALUATION FOR DEVELOPMENTAL EDUCATION

Jennifer Good, Auburn University

The purpose of this study was to evaluate the impact of the language arts component of the Developmental Studies program at Auburn University by measuring student outcomes of literacy growth as an ongoing and natural part of instruction.

Measures of literacy growth were obtained from six students enrolled in a language arts developmental studies course. The measures were comprised of ratings from essays and reading responses that were collected throughout the quarter in a portfolio and evaluated by two outside raters using a rubric. The growth, as indicated by changes in scores, was graphed at five separate intervals during the quarter using a single subject experimental design.

The researcher predicted an increase in the scores of students' reading response and writing proficiency as the quarter progressed. It was also predicted that rate and degree of growth will vary between individuals, indicating that students benefited most from developmental instruction.

RELATIONSHIPS BETWEEN READING ACHIEVEMENT AND SELF-CONCEPT WHILE CONTROLLING FOR SELECTED DEMOGRAPHIC VARIABLES

Charles W. Davidson, University of Southern Mississippi,
and Ann Speeding, Jackson (MS) Public Schools

Numerous theorists have suggested that there is a causal relationship between self-concepts of children and the children's academic achievement. However, an exhaustive review of the literature revealed only one study that may support this position. That there is a correlation between self-concept and academic achievement is virtually undisputed. Numerous studies have found a significant relationship to exist, especially for children with intelligence quotients above 90 on tests of mental ability. Most of these studies, however, have been bivariate studies and have not taken into consideration the numerous other variables that may play a role in both self-concept and in achievement.

The problem of this study was to investigate the relationships between the criterion variable reading achievement and the independent variables total scores and scores on each of the factors of the Piers-Harris Self Concept Scale while controlling for socioeconomic status, number of children in a household, age in months, number of times retained, number of adults in a household, gender, physical size, and race.

The self concept data were obtained by administering the Piers-Harris Self Concept Scale in the spring of 1997 to 145 third-grade children in three schools in a large municipal school district in a southern state. Reading achievement (total reading scores on the Iowa Tests of Basic Skills), number of times retained, and demographic data were collected from the subjects' cumulative records. Multiple regression analysis was used to analyze the data. While the multiple R between reading achievement and the best weighted set of the predictors was .658 (p=.0000), there were no significant changes in variance accounted for when total self-concept scores or scores on any of the six self-concept factors were added to the prediction system.

THE RELATIONSHIP BETWEEN THIRD-GRADE STUDENTS' DEFINITIONS OF READING, SELF-PERCEPTIONS AS READERS, AND THEIR READING PERFORMANCE

Mary E. Howe, Murray State University, and Dana G. Thames
and Richard Kazelskis, University of Southern Mississippi

The purpose of this study was to determine if students' definitions of reading and self-perceptions/attitudes as a reader were related to word recognition and comprehensio performances. Additionally, this study sought to examine if students' definitions of reading were related to a tendency to exhibit learning difficulties. The subjects in this study consisted of the entire third-grade population (i.e., 164 students) at a K-4 elementary school located in a small town in the southern region of the United States.

Results indicated that there was a significant difference between students' definitions of reading and comprehension performances as measured by an informal assessment, but no significant difference was found for comprehension performance on formal assessments, definitions of reading, and word recognition performance. Both negative and positive correlations were found between the Reader Self-Perception Scale scores and third-grade students' comprehension performance. In addition, a significant difference was found between the third-grade students' general and physiological states as self-perceptions as readers and the passed and failed groups for learning disabilities. No significant difference was found between students' self-perceptions as readers and the passed and failed groups for learning disabilities or definitions of reading.

Thus, results tended to support the notions that third-grade students': (1) definitions of reading were related to comprehension performance as measured by an informal reading assessment; (2) definitions of reading and self-perceptions have little effect on word recognition performance; (3) comprehension was not related to self-perceptions as readers; (4) self-perceptions as readers were related to the tendency to exhibit learning difficulties; and (5) self-perceptions as readers were not related to definitions of reading.

1:00 p.m.-1:50 p.m. **TEACHER EDUCATION (Discussion Session)....................Players**

PRESIDER: Jeffrey Gorrell, Auburn University

LEARNING FROM FIRST-YEAR TEACHERS: CHARACTERISTICS OF THE EFFECTIVE PRACTITIONER

Janet Lynn Norton, Educational
Consultant, Marietta, Georgia

The purpose of this study was to examine reflective thinking as it related to instructional and personality characteristics of an effective teacher. During semistructured interviews, 42 first-year elementary school teachers identified: (1) characteristics of an effective teacher and (2) preservice activities that, for them, were significantly related to professional development. These 42 participants represented three very different undergraduate academic institutions as well as a variety of public school teaching assignments.

Comments from participant interviews and results from one-way classification chi-square tests ($p < .05$) indicated several personality characteristics to be significantly related to effective teaching. Specifically, for these novice teachers, the effective practitioner was a caring, committed, highly creative, proficient reflective thinker with a strong internal locus of control. Furthermore, these characteristics were not isolated traits; they were, in Jessica's words, "definitely related."

Finally, qualitative data from this study identified six preservice activities that may maximize growth in technical expertise, teaching artistry, and reflective thinking. Such information, hopefully, will assist teacher educators in implementing the principles of effective teaching and reflective practice.

CURRICULAR CHANGES GRADUATES AND UNDERGRADUATES IN EDUCATION PERCEIVE TO BE NECESSARY IN THEIR PROFESSIONAL PREPARATION FOR TEACHING

Jerry B. Gee, Nicholls State University

Research throughout the existence of teacher education has consistently revealed a dilemma regarding "what knowledge and skills" should be acquired. As reported by the National Association of Scholars in March 1996, the percentage of mandated core credits in arts and sciences undergraduate curricula among the nation's 50 best-known colleges and universities has diminished to approximately one-third of that which was required in 1964. Specialized curricula have been revised without significantly increasing the number of fused and separate subject areas. To the contrary, the number of professional courses in teacher education has increased because of mandates by governing boards, standards of accrediting agencies, diversity among education majors, and advances in technology.

The purposes of this study were: (1) to review the related literature relative to recent changes in professional curriculum in teacher education, and (2) to survey graduate and undergraduate students currently enrolled in education in order to gain insight regarding their perceptions of future professional curricular needs. An extensive review of the literature was pursued to ascertain national trends in formulating professional curricula. Bulletins from selected Mid-South colleges and universities were also examined regarding recent changes in professional curricula.

Among reflections in the literature were changes in curriculum designs with adapted parallel blocks, diversified assessment techniques, special classes for nontraditional students with baccalaureate degrees other than education, and courses designed to address social and discipline problems in the schools. The study surveyed over 150 graduates and undergraduates majoring in education, graduate students with teaching experience majoring or minoring in curriculum and instruction, and seniors in their final semester completing professional education requirements prior to student teaching. A comparison of perceptions between the two groups of students revealed a general consensus with reference to practical curricular changes perceived to be necessary in professional preparation for teaching.

SEASONAL EFFECTS IN DETERMINING EMPLOYMENT RATES OF TEACHER EDUCATION PROGRAM GRADUATES

Judith A. Boser, The University of Tennessee

Determining employment rates of program graduates is usually accomplished through follow-up surveys of those graduates. In providing such information to external agencies, no weight is given to the time of year at which the follow up is undertaken. This study was conducted to examine the extent to which the time of year at which teacher education program graduates are surveyed to determine their occupational status impacts the results.

Data were collected from teacher education program graduates during the year following their completion of the licensure program. A mail survey of 284 such program graduates was conducted in early May of the year following their program completion. Questionnaires were returned by mail from 65% of the graduates. Among other information, the questionnaire requested information regarding their current employment, when they had received their first job offers, and when during the year they had been employed as teachers. The percentage of the group employed as teachers was calculated for the middle of each month from the start of school to the end of school.

The percentage of graduates reported as teaching can be expected to vary as much as 10% depending on the time of year at which employment is determined. Teaching employment rates for newly licensed teachers rates rise during the year, peaking in March before declining.

Recognition should be given to seasonal fluctuations in employment of new teachers, particularly if institutions are to be compared on this basis. For an institution's own needs, it is important that there be consistency in the timing of employment follow ups if comparable results are to be obtained.

1:00 p.m.-1:50 p.m. **EDUCATIONAL REFORM (Discussion Session)................ Missouri**

PRESIDER: Clifford A. Hofwolt, Vanderbilt University

COGNITIVE PERPLEXITY IN MAINTAINING TEACHER CHANGE: A CULTURAL VIEW

James D. Johnston, Harding University

The purpose of this position paper was to provide acknowledgment and development of a cultural interpretation of classroom teaching. The impetus for these views originated with the implementation of the Schools for Thought (SFT) approach to teaching and learning. The paper represented a project manager's interpretation of experiences during the last two years of a three year implementation project. Seventeen teachers volunteered to make and maintain professional change consistent with the SFT frameworks.

The two-year study revealed three basic teacher response types to the challenges for change. These types have been described as Pioneer teachers, Ladies-in-waiting, and Rebels-without-a-clue. The emergent nature of the SFT classroom established definitive participant structures for classroom interactions that completely exchanged teacher and student identities for innovative experiences. These changes, in turn, revealed the powerful hold traditional classroom identities have as culturally-based experiences. Our cultural view of classroom teaching transcended mere environmental descriptions and quick-fix innovations. A catalyst for the clash between the traditional non-participant, one-right-answer classroom culture and the emergent SFT classroom culture was the teacher implementation of participant structures. This paper further described the research implementation team's daily efforts to provide language, tools, and systems of abstract thought necessary to produce desired and lasting instructional change.

In addition the paper provided brief explanations of the following: the Schools for Thought project and the three components that were used, expectations and obligations of both teacher and researcher, and the assessment results of consecutive years. The paper concluded with challenges in classroom management, and overcoming phobias in technology and authentic participation of students.

TRACKING AND ABILITY GROUPING PRACTICES IN K-12 SCHOOLS: A REVIEW OF THE LITERATURE

Marsha A. Zenanko, Jacksonville State University

This literature review defined the social, political, and educational issues of tracking by drawing primarily from the works of Oakes, Goodlad, and Slavin between the years 1980-96. Tracking and ability grouping referred to systems that classified and separated students or classes according to ability levels for different educational treatment. Goodlad found inequities in subject-matter content, instructional practices, and student-teacher relationships favoring high- over low-track classes. Oakes found that school tracking perpetuated the racial and social divisions of society to the detriment of low achievers who came from poor and minority families. Slavin found that the overall effects of ability grouping clustered around zero for students of all achievement levels. Over 700 studies revealed the overall negative effects of tracking and ability grouping (George), yet the practice continues to be widespread.

Implications of this review revealed the importance of educating the public about the effects of tracking and urging educators and policymakers to reexamine programs and practices that require student tracking. Strategies such as cooperative learning and mixed ability grouping were recommended as alternatives to tracking (Slavin).

AN ANALYSIS OF STUDIES OF COLLABORATION BETWEEN UNIVERSITIES AND K-12 SCHOOLS

Mildred E. Kersh and Nancy B. Masztal,
University of Southern Mississippi

Faculty in teacher education institutions are constantly urged to collaborate with schools to initiate educational reforms. Professional development schools, grant-supported efforts, and university-sponsored tutoring programs are but a few examples of common collaborations. The costs, however, particularly in time, effort, and the probability of success make both the university and the schools reluctant partners. In the dozen years since A Nation at Risk (1983) set off a maelstrom of educational reforms, most of which were hastily conceived and implemented, some meaningful results about collaborations and reforms are now emerging.

The purpose of this study was to analyze the literature on university and K-12 school educational reform partnerships, particularly studies that offered reflections on the collaborative process. To be included in the analysis, the collaboration had to meet these five conditions: (1) the project was initiated between 1983 and 1994; (2) the minimum length of the project was three years; (3) the project was reported in journals and other publications retrievable thorough ERIC; (4) the report of the project included an evaluation plan; and (5) at a minimum, one entire school in the district was involved.

The result of this analysis was a set of minimum conditions that must be met for there to be any hope for a successful university-school collaboration, success being defined as making a sustained and lasting positive effect. Some conditions were common knowledge, while others involved nuances of the obvious.

The results of this analysis may have implications for clarifying and thus strengthening university-school partnerships. One should learn from the mistakes of others, since neither one individual nor one project ever lives long enough to make and correct all possible mistakes. Sometimes even an experienced collaborator, because of enthusiasm, fails to heed the caution signs along the way. Violation of the principles/conditions identified from this analysis must be with a conscious knowledge of what the consequences might be.

1:00 p.m.-1:50 p.m. **HIGHER EDUCATION (Discussion Session)...............Parlor 104/106**

PRESIDER: Linda T. Coats, Mississippi State University

LEVELING THE PLAYING FIELD: A COMPARISON OF TEST SCORES ON CONTENT AREA TESTS FOR COLLEGE STUDENTS WITH AND WITHOUT LEARNING DISABILITIES

Kathryn A. Jarvis, Auburn University

The purpose of this study was to examine the accommodation of extending time for college students with and without learning disabilities on classroom content area tests. Six college classes participated in the study. Three were from business and three from hospitality management. Subjects included 157 college students, ages 19 to 23. Forty were students with learning disabilities, and 117 had no diagnosed learning disability. All subjects served as both the experimental and control group and came from the population of college students enrolled at the university.

The following questions were addressed: How does providing extra time on classroom tests affect the test performance of college students with and without learning disabilities? Does this practice provide an unfair advantage, or does it accommodate for the disability? If all students can benefit from more time to complete tests in the classroom, then is this a reasonable accommodation, and should it be extended to any student if it is requested?

Results of a two-way repeated measures ANOVA ($p < .001$) indicated that additional time on classroom tests benefited students with learning disabilities to the extent that their scores increased to the level of students without learning disabilities who did not take additional time. The scores of the students without learning disabilities also increased when additional time was taken.

TEFATE - TENNESSEE EXEMPLARY FACULTY FOR ADVANCED TECHNICAL EDUCATION: A SUMMARY REPORT FOR YEAR ONE

Collin Ballance and Sydney Rogers, Nashville State Tech,
and Roger Deveau, University of Massachusetts

Nationally, the telecommunications industry is a dynamic and competitive enterprise. The installation of increasingly sophisticated equipment along with deregulation and other factors has created a demand for new workers who possess a highly specialized skill set. The Tennessee Exemplary Faculty for Advanced Technical Education (TEFATE) project is a two-year program funded by the National Science Foundation. The overall goal of the project is to create a work-based learning environment that supports the growing communications technology industry. Among the products that this project will produce in its second year are a DACUM-based two-year college curriculum for associate's level degree work, a set of modular case study materials coordinated with the curriculum, and a set of guidelines for conducting industry internships for faculty.

This project is a collaborative effort of five two-year colleges in Tennessee. Interdisciplinary teams are made up of college instructors, high school (Tech Prep) teachers, university professors, and representatives (partners) from the telecommunications industry. Project staff have spent year one involved in numerous skill-building workshops, industry site visits, and collaborative efforts focused on curriculum development and case study development tasks. Year one concluded with a week-long workshop featuring industry leaders, training and curriculum specialists, and collaborative team work on the initial set of industry- and work-based case studies.

A summary of the project evaluation for the first year was presented. This summary was based on assessments made both internally and externally, and focused on the training workshops, the industry site visits, the industry internships served by a portion of the faculty, and the year-end workshop activities. The program has achieved its year-one objectives, and both formative and summative assessments were shared. The year-two goals and planned activities, based on the accomplishments of the project's first year, were shared and discussed.

THE BABY BOOM ECHO: IMPLICATIONS FOR HIGHER EDUCATION IN THE MID-SOUTH

Gary D. Chamberlin and Kathy Kramer Franklin,
University of Arkansas at Little Rock

The phenomenon known as the "Baby Boom" created challenging capacity problems for education institutions until the early seventies. In a report issued by the U.S. Department of Education in fall, 1996, Secretary Richard Riley noted that a new national record of children attending school, or the "Baby Boom Echo," was projected for the 1996-97 school year and to continue unabated until the year 2006.

According to Secretary Riley, public school enrollment is expected to increase by 15%. The number of high school graduates is expected to increase by 17% with a college enrollment increase of 14%. Furthermore, Hispanic-Americans and Asian-Americans are predicted to be the fastest growing segments of the student population. Because of this growth in school attendance, Secretary Riley predicts a national shortage of 190,000 teachers, 6,000 schools, and $15 billion in annual operating expenditures by 2006. It can be assumed that if the K-12 arena is demanding increasing levels of resources to accommodate this growth, and, if the college enrollment projections are correct, higher education may be entering a new century faced with the challenge of servicing an increasing demand with increasingly limited resources.

Because the largest growth in school enrollment is expected to be in the west and southeast parts of the United States, the purpose of this position paper was to investigate the consequences of this population growth and changing student demographics on higher education systems in the Mid-South. The authors of this paper consulted the U.S. Bureau of Census statistics, actual counts of live births and school enrollments, and other relevant information to determine the extent to which the Baby Boom Echo will influence higher education. Based on the evidence compiled, recommendations were made concerning strategies to prepare higher education systems for the projected enrollment increase.

1:00 p.m.-1:50 p.m. **EARLY CHILDHOOD EDUCATION**
(Display Session) .... **Directors Room**

YOUNG CHILDREN'S THEORIES AND CONSTRUCTION OF KNOWLEDGE: A CURRICULUM MODEL PROJECT WATERFALL

Indranie Dharmadasa, Auburn University

The purpose of this study was to examine young children's construction of knowledge when they are faced with interesting and challenging phenomena: constructing a waterfall, using appropriate materials, and interacting with a multi-age social environment.

The project's 71/2 feet high waterfall was constructed in 20 days in the classroom by 15 children of the age range of five to eight years. Data were collected by means of observations. The whole sequence of activities on the construction of the waterfall was video recorded. Interviews were conducted where necessary to collect in-depth individual data, and they were audio recorded. Qualitative analysis approach was adopted to interpret data.

Results showed that basically children constructed knowledge through experimentation and observation. The cognitive conflicts that occurred because of challenging activities and the materials used in the construction of the waterfall paved the way for children's experimentation and observation. Experimentation and observation helped them to test theories they held and build new theories based on their findings. Children constructed knowledge through social interaction when they had more time to engage themselves in an activity with their peers.

Confronting with challenging and interesting activities provided opportunities in various ways for children to construct knowledge both in groups and individually. Learning situations that captured children's interests promoted children's constructions. Such curricular models have allowed children to develop logical reasoning structures that will enhance their learning.

ASSESSMENT: YOUNG CHILDREN AND THE VISUAL ARTS

Judy Ann Hale, Jacksonville State University, and Sandra T. Boozer, Pleasant Valley Elementary School (AL)

The topic was the assessment of young children's reading abilities through the use of artwork. According to Lowenfeld and Brittain (1987), if the objects in a child's drawing are unrelated to each other (a characteristic of the preschematic stage of art development), then that child does not have the ability to relate letters to each other and is not ready to learn to read. Adults can encourage the development of cognition and literacy by providing children with a variety of drawing materials. Cognition and literacy can be encouraged by helping children to become more aware of their environment and their relationship to that environment. This developing awareness of their relationship to the environment is reflected in the children's drawing. This display was significant in that it demonstrated how the artwork of children could act as a compound to unite cognition and literacy.

This study consisted of 17 transitional/first-grade children. A portfolio was developed for each child and consisted of artwork and documentation of reading abilities. The stage of art development and cognitive level of each child was determined.

YOU CAN'T EDUCATE AN EMPTY CHAIR: PARENT INVOLVEMENT IN TYPICAL CLASSROOM LESSONS DEMONSTRATES AN INCREASE IN SCHOOL ATTENDANCE

Beatrice Kramer Volkman, Mississippi University for Women

Current researchers posit that the most accurate predictor of student success is the extent to which families become engaged in the educational process. There is general indication that teachers use infrequent parent involvement strategies and that parents may also believe that it is not important for them to become involved in classroom lessons. Because educational, cultural, and economic boundaries can hamper parents' understanding of the importance of the educational process, the principal investigator designed a research study to determine: (1) if parents involved in regular classroom lessons will change their attitudes toward school change, and (2) if parents' attitude change toward school will affect students' school attendance

This action research study included 11 treatment and 11 control elementary classrooms with diverse and transient populations in an urban school district, parents of the students, 42 preservice teacher-researchers, and one university professor. Parents were invited to team with their children in a typical classroom lesson for one hour, one day each month. Preservice teacher volunteers (1) participated with students who had no parent with them during the lesson, and (2), after the lesson, engaged students in a short activity so that the teacher and parents could talk.

Data included parent questionnaires, interviews, and student attendance records. Results suggested that parents' attitudes toward school underwent a gradual positive change when parents became involved in classroom lessons. Between group comparisons of attendance records of the treatment and control groups indicated statistically significant difference at the .05 level. In all cases there were positive effects associated with parent involvement in regular classroom lessons.

2:00 p.m.-2:50 p.m. **TEACH FOR AMERICA (Symposium Session)..................Arkansas**

IMPACT OF TEACH FOR AMERICA IN THE RURAL SOUTHEAST

ORGANIZER: Matthew M. Wilhelm, Delta State University

The Teach for America Program: National Scope
Ron Nurnberg, Teach for America (MS)

The Teach for America (TFA) Program was described, including a discussion of federal funding sources related to AMERICORPS as well as funding from private foundations. The structure of TFA was shown to involve 13 placement regions in the nation, four of which were rural with nine urban sites. TFA goals and objectives fit particularly well with special needs of the rural Southeast, providing a central focus for the symposium.

TFA Corps Members to Service Learning Placements

Matthew M. Wilhelm, Teach For America (MS)

Analysis of survey results from 936 TFA Corps Members nationally were compared with TFA Corps Members located in the Mississippi Delta (N=47). Corps Members in the Delta were more likely (95.45%) to serve as a supervisor of school related extracurricular activities than were TFA Corps Members nationally (86.51%). Further, Delta TFA teachers were more likely to initiate extracurricular activities (65.91%) than were TFA teachers nationally (47.90%). This was argued to be directly attributable to the lack of such activities in the Mississippi Delta region. Mississippi Delta Corps members were also rated higher on the ability to establish clear, measurable goals for students based on high expectations (97.73%) than were TFA teachers overall (92.23%). Additional results from the 60-item survey demonstrated the energy and overall quality that TFA Corps Members bring to rural Southeast districts.

School Administrator's Responses to TFA Placements

Mary Jennifer Crawford, Teach For America (AR)

Analysis of survey results from 333 school administrators nationally were compared with school administrators who supervised TFA teachers in the Mississippi Delta (N=15). Overall performance evaluations for TFA teachers were higher (91.70% equal or better than other beginning teachers) in the Delta than they were nationally (74.99% equal or better than other beginning teachers). Similar results were obtained even when TFA Corps Members were compared with experienced teachers. Other comparisons from the 16-item survey were presented in terms of both regional and national impact.

TFA: The Present Situation and the Potential

Edie Tatel, TFA (WA) and
Sarah Newell, TFA (LA)

A statistical profile of selected TFA school districts was presented. A discussion by presenters, TFA Corps Members, and the audience provided new insights on the program as well as the future for TFA in the rural Southeast. Possibilities for increased networking and resource sharing among volunteers were discussed. The audience was informed of the process of applying for TFA Placements.

2:00 p.m.-2:50 p.m. **FINANCE (Discussion Session)..................................Ridgelake**

PRESIDER: Dennis C. Zuelke, Jacksonville State University

FUNDING DISPARITIES BETWEEN PUBLIC SCHOOL DISTRICTS IN MISSISSIPPI

T. Lee Napier, Jackson State University

In the Spring of 1996 the Mississippi Report Card 95 was published by the Mississippi State Department of Education. This document was a district-by-district report that included information on accreditation, finances, student achievement, and other variables that could be utilized to assess to some extent the success of the school district. Questions have surfaced regarding disparities in the funding of the public school districts in Mississippi and the relationship of these disparities to student achievement as well as the level of accreditation of the districts. This study was designed to explore these areas of concern. The Report Card 95 and the Annual Report of the State Superintendent of Public Education of Mississippi were utilized to obtain data with respect to per pupil expenditures, accreditation levels, local millage rates, and 23 student achievement indicators.

Data analysis revealed that disparities existed in terms of valuation per pupil in ADA (VPPADA), local per pupil expenditures (LPPE), state per pupil expenditures (SPPE), combined local and state per pupil expenditures (LSPPE), and local millage rates (Mills). The wealthiest school districts were shown to be the recipients of significantly higher LPPE and LSPPE than the poorest districts; urban school districts were shown to be significantly higher in LPPE, and Mills than rural districts; while rural districts were significantly higher in SPPE; schools with superior accreditation levels tended to spend more money per pupil; and most of the achievement variables were significantly related to LPPE (20 of 23). Perhaps the most interesting finding of all was that those school districts where the citizens of the district taxed themselves at higher rates (Mills), although the district did not necessarily have the higher VPPADA, tended to be accredited at higher levels, and students tended to achieve more.

FUNDING OF HIGHER EDUCATION IN TENNESSEE: A QUALITATIVE STUDY OF THE PERCEPTIONS OF STATE LEGISLATORS AND HIGHER EDUCATION LEADERS

David D. Collins and Russell F. West,
East Tennessee State University

The purpose of the study was to identify issues that are considered important to legislators and higher education leaders from Tennessee in making decisions that affect the funding of higher education. A further purpose was to identify actions that might be taken by higher education leaders to ensure that higher education is accountable and deserving of continued or increased financial support.

Using a qualitative research design, interviews were held with 10 legislators and six higher education leaders selected through a purposeful sampling technique. Legislative participants included five members from both the Senate and House of Representatives. All participants served on either the Education Committee or Finance Committee within their chamber. Higher education leaders consisted of a university president; the chief executive officer of the University of Tennessee, Tennessee Board of Regents, and Tennessee Higher Education Commission; Comptroller of the Treasury; and a member of the University of Tennessee Board of Trustees.

Two primary categories were identified from the interviews: (1) issues affecting higher education and (2) findings regarding the accountability of higher education. The issues category was sub-divided into eight categories: (1) financial issues, (2) administrative structure and costs, (3) quality outcomes, (4) faculty issues, (5) technology, (6) program duplication, (7) relationship to K-12 education, and (8) other general issues. Accountability findings included the measurement of educational outcomes and communication of those results to legislators and the public.

Three recommendations were offered: (1) a committee consisting of appropriate representatives be established to study the issue of accountability and determine appropriate measurements that will provide relevant information, (2) improve communication with legislators and their staffs, and (3) improve communication with the public.

A CASE STUDY INVESTIGATING THE FUNDING OF PUBLIC EDUCATION K-12 IN URBAN VERSUS RURAL SCHOOL SYSTEMS IN TENNESSEE

Valerie Copeland Rutledge, The University of Tennessee at Chattanooga

In 1988, a group calling themselves the Tennessee Small School Systems (TSSS) challenged Tennessee's K-12 public school funding formula. This case, officially known as Tennessee Small School Systems vs. McWherter, has also been called the rural versus urban school systems lawsuit because it effectively pitted the smaller, less affluent, mostly rural school systems of the state against the larger, wealthier, mostly urban systems. At stake were the dollars expended each year for K-12 students in public schools throughout Tennessee.

This study investigated several factors related to this lawsuit. A review of the literature and related cases revealed information about the climate leading up and contributing to the filing of the suit. In addition, K-12 public school finance data and personal interviews conducted with major figures in the case provided details about the changes implemented in Tennessee. Specifically, per pupil expenditures and other categories were utilized to compare the dollars provided for public education in selected rural counties since the implementation of the Better Education Plan (BEP) with the dollars provided in certain urban counties during that same time.

Observations were made and conclusions drawn about the future of K-12 public school financing in Tennessee. Final recommendations included suggestions for addressing the continuing inequities between less affluent counties and wealthier counties in the state.

2:00 p.m.-2:50 p.m. **EXPERT/NOVICE TEACHERS**
(Discussion Session)..Players

PRESIDER: John A. Freeman, The University of Alabama

PERCEPTIONS OF BEGINNING ELEMENTARY TEACHERS; NOVICE TEACHERS REFLECT UPON THEIR BEGINNING EXPERIENCES

Patricia M. Britt, DeSoto County (MS) Schools

The purpose of this study was to determine the perceptions of beginning elementary teachers. By better understanding teachers' perceptions of their beginning experiences we may find ways to help prevent reality shock. The research question for this study was: What have been the perceptions of elementary teachers about professional concerns after the first year of teaching? In an effort to answer this question, qualitative data were collected from questionnaires completed by teachers after completion of their first year of teaching. Subjects for this study were a purposefully selected group of beginning teachers.

The data that emerged were classified into three areas: (1) time management, (2) parental involvement, and (3) professional preparation. As far as time management, teachers felt that there never seemed to be enough time left after dealing with discipline problems. In dealing with parents, there were varying responses, but, in general, they were disappointed with the lack of concern shown by parents. When it came to preparation for teaching, beginning teachers felt that they learned more during student teaching than they had in the 3 1/2 years of their education program. Implications from this study suggested a need for more assistance for beginning teachers in several areas and a strong need for mentors for beginning teachers along with more involvement working with students prior to the student teaching experience.

DIFFERENCES IN REFLECTIVE THOUGHT BETWEEN NOVICE AND EXPERIENCED TEACHERS

Amany I. Saleh, Arkansas State University,
and Liza Wilson, The University of Alabama

The purpose of this study was to examine the differences in reflective thinking between novice teachers and teachers with different degrees of experience. Based on previous research it was hypothesized that there are three different levels of reflection: technical rationality, which focuses on classroom competency and efficiency as measured by specific outcomes; practical action, in which the teacher becomes concerned with clarifying his/her predetermined assumptions; and critical reflection, in which the teacher is concerned with the value of knowledge without distortions of personal bias.

The participants were divided into three groups: the first consisted of secondary education major students who were enrolled in a method class and had taught a unit in a regular class in public schools; the second group consisted of preservice teachers; and the third group consisted of experienced teachers in public schools.

The first and second groups were asked to keep a weekly journal to document their reflection on the practices that take place in the classroom. Also, all participants were asked to answer a questionnaire designed to elicit some reflection on specific aspects of lesson planning and teaching practices.

Results indicated that experienced teachers exhibited significant differences in reflective thinking than novice teachers. Differences also existed between novice teachers: student teachers were more reflective than the method's students. It appears that the majority of method's students and student teachers were more concerned with classroom management than experienced teachers.

A RUSSIAN AMERICAN APPROACH TO EVALUATING EXPERT SCIENCE TEACHING FROM A CONSTRUCTIVIST PERSPECTIVE USING ESTEEM

Judith A. Burry-Stock, The University of Alabama; Gary F.Varrella,
Ohio University; Lyudmila Dorogan, Voronezh Inservice Institute,
Voronezh, Russia; and Robert E. Yager, University of Iowa

The Expert Science Teaching Educational Evaluation Model (ESTEEM) was developed to enhance professional development in science teaching. It was a U.S. Office of Educational Research and Improvement (OERI) project supported by the Center for Educational Research on Educational Accountability and Teacher Evaluation (CREATE). It was developed according to a combination of constructivist and expert teaching philosophy, houses six instruments, and matches the professional development section of the new National Science Education Standards. ESTEEM has been used in about 15 million dollars of grants and has been translated into Russian.

The Russian educational system is different from that of the U.S.; however, the Russians are also interested in constructivist science teaching. Russian data on eight teachers were collected during a one-month visit to Voronezh, Russia funded by the National Research Council. These data were compared with two groups of American teachers. One group (traditional U.S. teachers) was randomly sampled from the original CREATE expert science teaching study and the other (reform U.S. teachers) was from teachers participating in an in-depth reform project.

An analysis of variance with the Russian and traditional U.S. teachers revealed statistically significant differences on the Science Classroom Observation Rubric. The Russian teachers were higher than the traditional U.S.teachers on Category IV, Content Knowledge, while the U.S. traditional teachers were higher on Category I, Facilitating the Teaching Process. Another ANOVA was performed on the Russian and reform U.S. teachers. The U.S. reform teachers were statistically significant on all four categories: Category I, Facilitating the Teaching Process; Category II, Context-Specific Pedagogy; Category II, Context-Specific Pedagogy; Category IV, Content Knowledge; and the total rubric score. One of the outcomes of these studies suggested that teaching from a constructivist perspective may require more in-depth knowledge of the lesson content. Other qualitative and quantitative differences existed on teacher training, class scheduling, teacher attitudes, and student attitudes.

2:00 p.m.-2:50 p.m. **GENDER ISSUES (Discussion Session)............................Missouri**

PRESIDER: Linda W. Morse, Mississippi State University

REACTIONS OF EIGHTH-GRADE STUDENTS TO SINGLE-SEX CLASSES IN MATHEMATICS

Stella Brown Wear, Delta State University

The purpose of the study was to determine the reactions of eighth-grade students toward being placed in single-sex mathematics classes. The qualitative study was part of a larger study that was designed to evaluate this type of classroom structure for a school system.

The 54 subjects were from two pre-algebra eighth-grade classes in West Alabama. One class was all male (n = 27); one class was all female (n = 27). The students wrote journals, answered surveys, and participated in informal interviews during the last two months of the study.

The qualitative data were analyzed for key words that identified recurring patterns. The reactions of the students to the single-sex class structure varied. Even though each student was positive about her/his experience in the single-sex class, only about half of each group said that they would prefer a single-sex class again if given the choice. The aspects of the all-girls class that influenced them to choose it again were comfort, support, and cooperation with friends, whereas what caused the girls to prefer mixed was the higher level of competition in a mixed class. Boys that preferred the all-boys class were influenced by their improved ability to study since they were not being distracted by girls in class. The main reason some of the boys preferred mixed was their desire to be with girls for social reasons. Follow-up interviews were conducted with the teachers of these classes for validation of these reactions.

A COMPARISON OF SCIENCE ATTITUDES AND INTERESTS BETWEEN MIDDLE SCHOOL MALES AND FEMALES IN SINGLE-SEX AND COED SETTINGS

Kathleen Campbell and Debbie McCarthy,
Academy of the Sacred Heart (LA)

The underachievement of females in society is evident in talent development, occupational attainment, and self-concept of adult females. Females are overrepresented in education and literature and underrepresented in science, math, and engineering and in most of the high-status occupations. Although females comprise 55% of the workforce, they represent only 8.6% of all engineers and 30% of all physical scientists. The underrepresentation of females in science, math, and engineering is an issue that must be addressed in order to increase female participation in these fields. The purpose of the study was to determine if a single-sex environment contributes to a more positive self concept in science among females. If the presence of males intimidates adolescent females regarding their competence and confidence in science, then females who attend a single-sex school should have a more positive attitude toward and a stronger interest in science.

The present study compared eighth-grade males and females from a private, coed middle school with eighth-grade females from a private single-sex middle school on their attitudes toward and interest in science. Subjects completed a self-report science questionnaire concerning their attitudes toward (confidence and competence in) science as well as their interest in science. An analysis of variance was used on the data.

Results indicated a significant difference in both attitude toward and interest in science between the females from the two different settings but a non-significant difference between the single-sex females and the coed males.

Environment is only one factor that influences a child's feelings of confidence and competence in science; therefore, all of those factors that contribute to a positive self-concept of females in science should be explored in order to increase the number of females who enter occupational fields of science, math, and engineering.

SEX DIFFERENCES AMONG ELEMENTARY SCHOOL STUDENTS IN THE TOP FIVE PERCENT OF VERBAL ABILITY

Hae-Seong Park, University of New Orleans, and Scott M. Norton,
Louisiana State Department of Education

The purpose of this study was to determine whether sex differences existed in English performance of high-achieving (top 5%) elementary school students. A sample of fourth (n=1810) graders was drawn using the 1996 California Achievement Test (CAT) scores in the state of Louisiana. Multivariate analysis of variance was employed to determine the impact of gender on English performance. English performance was measure through four dimensions: reading vocabulary (VOCAB), reading comprehension (COMPR), language mechanics (MECHA), and language expression (EXPRE). A significant (p<.0001) sex difference was found on overall English performance.

Specifically, girls performed higher than boys in EXPRE, while boys outperformed girls in VOCAB. The results of the subgroup analysis showed that Caucasian girls were the highest group in COMPR, MECHA, and EXPRE, while African American boys were the highest group in VOCAB. Suggestions for future research were offered.

2:00 p.m.-2:50 p.m. **PROFESSIONAL DEVELOPMENT (Discussion Session)..Parlor 104/106**

PRESIDER: Regina Halpin, Mississippi State University

USING VIDEO-BASED CASES TO HELP PRESERVICE TEACHERS DEVELOP NEW MODELS OF TEACHING AND LEARNING IN MATHEMATICS EDUCATION: CONTRIBUTIONS AND LIMITATIONS

Martha Martin and Linda Barron, Vanderbilt University

Video-based cases of classroom instruction were used in an elementary mathematics methods course to provide a context for preservice teachers to investigate the implications for learning mathematics in both traditional and reform-based classrooms. The purpose of this study was to assess the usefulness of video-based cases in helping preservice teachers develop models of teaching and learning consistent with reform recommendations.

Participants in this study were six preservice teachers who were enrolled in the methods course and in the associated practicum. Qualitative data were collected over an entire semester. Participants' written assignments, lesson plans, and transcripts of interviews and lessons were analyzed by the grounded-theory method to infer the contributions and limitations of the video-based materials to participants' learning.

Participants' papers showed that they had used the video-based cases to learn about specific aspects of reform teaching. All preservice teachers incorporated some reform ideas into lessons. Three participants attempted to make adjustments to their lessons based on their students' reasoning about problems. These participants reported that seeing students' success in reasoning about problem solving was important in forming their new beliefs about teaching and learning. Three participants, however, gave less emphasis to building on students' own solutions to problems. These participants maintained traditional views about mathematics and about the role of the teacher. Intervening factors for these three teachers included perceived lack of support from cooperating teachers and perceived lack of pedagogical and mathematical knowledge.

Video-based cases can be useful in helping preservice teachers learn about reform teaching. The problem of making adjustments to lessons, however, may be a difficult problem for inexperienced teachers to solve using video-based materials.

INTEGRATING MATHEMATICS AND LANGUAGE ARTS IN THE ELEMENTARY CLASSROOM: A PROFESSIONAL DEVELOPMENT PROGRAM FOR ELEMENTARY TEACHERS

Susan T. Franks, Judi Kent, Bonnie Oppenheimer, and
Gene Franks, Georgia Southern University

This discussion presented the results of a mathematics and language arts professional development program for elementary teachers. The program was established as a joint endeavor between Georgia Southern University and the local public school system. The purpose of the program was to provide professional development for teachers in a county where a significant segment of underserved and underrepresented children reside. The focus of the program was to improve mathematics and language arts instruction in the elementary schools of the district. The primary objective was the integration of language arts and mathematics instruction. In addition, a teacher network was established that provided peer support.

Elementary classroom teachers participated in 50 hours of workshop sessions that were designed to help them become confident in their own ability to teach mathematics. Teachers were introduced to innovative instructional strategies that utilized manipulative materials in mathematics. Methods for integrating mathematics with language arts writing strategies were presented.

Teachers completed quantitative and qualitative assessments. These assessments emphasized problem solving, communication, reasoning, and the use of manipulatives. Using a pre-post quasi-experimental research design, preliminary results indicated that the program was successful. Also, a survey of the participants indicated that the teachers were better prepared to teach mathematics. They were more confident in their own ability to teach mathematics and understood the process of integrating mathematics with the language arts.

2:00 p.m.-2:50 p.m. HIGHER EDUCATION (Display Session)................ Directors Room

THE ROLE OF MULTIPLE INTELLIGENCES IN STATISTICS ANXIETY

Christine E. Daley, University of Central Arkansas,
and Anthony J. Onwuegbuzie, Valdosta State University

Statistics anxiety has been found to be a psychological barrier to achievement in both statistics and research methodology courses. Unfortunately, limited research exists on the characteristics of students with high levels of statistics anxiety. Since researchers have found a relationship between IQ and various types of anxiety, intelligence may be another factor involved in statistics anxiety. Thus, the purpose of this study was to assess the role of Gardner's (1983) theory of multiple intelligences in determining levels of statistics anxiety. Participants were 90 graduate students from a variety of disciplinary backgrounds who were enrolled in four sections of an educational research methodology course. A canonical correlation analysis revealed that students who were less oriented toward linguistic and logical-mathematical intelligence and more oriented toward spatial and interpersonal intelligence tended to have higher levels of statistics anxiety. These findings suggested limited support for the theory of multiple intelligences. Implications for future research were discussed.

PREVALENCE AND REASONS FOR UNIVERSITY LIBRARY USAGE

Qun G. Jiao, Baruch College, City University of New York;
Anthony J. Onwuegbuzie, Valdosta State University;
and Christine E. Daley, University of Central Arkansas

A study of 522 university students was undertaken to determine how often they used the library and why, as well as to develop a general profile of college student library users. Descriptive statistics revealed that the majority of students used the library at least once a week. Obtaining a book or an article for a course paper was the most common reason cited for library use, followed by studying for a test, and then using the computerized indexes and online facilities. A setwise multiple regression analysis revealed that students who used the libraries most tended to be older, male, those who did not speak English as their native language, who lived the nearest to the academic library, who preferred to study alone, and who had the lowest levels of library anxiety. In addition, these students tended to visit the library either to study for a test, to read current newspapers, to read their own textbook, to use computerized indexes and online facilities, or to meet friends. The implications of these findings were discussed, as were recommendations for future research.

3:00 p.m.-4:50 p.m. LEARNING STYLES (Training Session - 2 hours).............Louisiana

USING LEARNING PREFERENCE ASSESSMENT TO ENHANCE TEACHING

Linda T. Coats, Clara Y. Young, and Pamela A. Taylor,
Mississippi State University

Since the introduction of Goals 2000, state and local public school officials have initiated legislature and taken measures to improve the quality of education provided to public school students. However, despite these efforts an alarming percentage of students' scores on standardized tests are still in the lowest quartile of the distribution. Thus, the challenge for teacher educators and preservice teachers is to identify how individual students process information and what environmental factors facilitate knowledge acquisition.

The purpose of this training session was to heighten teacher educators' and preservice teachers' awareness about the importance of using learning preference assessment as a tool for effective teaching. The objectives of this training session were to familiarize participants with three learning preference inventories by assessing their learning preferences, to discuss and examine the theoretical framework that support each inventory, and to demonstrate ways that knowledge of students' learning preferences can be used to enhance teaching and facilitate learning.

The training session was conducted in three phases with participants organized into three cooperative groups. Phase I consisted of participants assessing their learning preferences with each group utilizing a different learning preference inventory. Phase II consisted of an analysis and explanation of the respective assessments. Phase III consisted of a discussion regarding the implication for utilizing assessments with teacher educators, preservice teachers, and students. The training culminated with groups reconvening to share comparison of the assessment and to discuss each group's discoveries regarding the importance of utilizing learning preference assessment in education.

3:00 p.m.-3:50 p.m. ADULT EDUCATION (Discussion Session)......................Arkansas

PRESIDER: Linda Cornelious, Mississippi State University

PARTICIPATION OF OLDER ADULTS IN SELF-DIRECTED LEARNING ACTIVITIES IN ORDER TO ENHANCE LIFE SATISFACTION

M. Craig Hankins, The City of New Orleans

Several studies have yielded correlations between life satisfaction and continued learning through self-directed learning; however, the participation rate in adult education activities among older adults has been underreported because of a narrow focus. Life satisfaction and self-directed learning are explored as they relate to older adults -- those individuals 55 years of age and above.

When the definition of adult education activities is expanded to include self-directed learning activities outside a formal learning environment, reported participation rates increase. While older adults are participating in educational activities, there are various barriers to participation in which the older adult must overcome. These barriers may be categorized as situational, institutional, informational, and psychosocial. The major barrier is past educational attainment. Studies have shown that the likelihood of older adults to participate in adult education activities increases with each year of education attainment.

Various activities were listed that expanded the opportunities of adults to participate in educational activities. In addition, suggestions were made that assisted agencies and educators in encouraging participation in adult educational activities, including self-directed learning.

EFFECTS OF COMPUTER-ASSISTED INSTRUCTION ON SCORES OF THE TEST OF ADULT BASIC EDUCATION OF PRISON INMATES

John Stuart Batchelder and Charles W. Davidson,
University of Southern Mississippi

The findings of studies on the effects of computer-assisted instruction (CAI) on student achievement have been inconsistent. While many have shown that CAI produces an increase in achievement, others have indicated that CAI is no more effective than traditional instruction alone. The purpose of this study was to ascertain the effects of CAI in addition to traditional instruction on scores of the Test of Adult Basic Education (TABE) of inmates in a southern prison.

Seventy-one inmates who were participating in a prison education program were randomly assigned to an experimental group that received 20 hours of CAI in addition to 60 hours of traditional instruction or to a control group that received 80 hours of traditional classroom instruction. All of the inmates were male: 56 were African American, and 15 were white.

Multiple regression analysis was used to compare the posttest scores on the TABE of the two groups while controlling for pretest scores. There was no significant difference between the experimental and control groups in achievement.

The results of this study indicated that, although there may be some advantages in using CAI with inmate populations, if the intent is to increase academic achievement in mathematics, reading, and language, traditional instruction may be just as effective.

WORK FORCE ILLITERACY IN ALABAMA

Robert R. Horne, Jr. and Jacquelyn P. Robinson,
Auburn University

On February 12, 1996, Alabama Governor Fob James, Jr., signed Executive Order 15, creating the State Literacy work force Development Council to address the impact of illiteracy on Alabama's work force and economy and to make recommendations on how to address the problem. The Survey Group was charged with providing the Team information and/or data identifying (1) the extent and scope of Alabama's illiteracy problem in economic and cultural terms, (2) the cost of illiteracy to the state, and (3) the literacy skills needed by Alabamians in order to positively and significantly impact the state's economy and its culture.

Data were collected from existing data bases and public records by the Survey Group and analyzed using a variety of statistical techniques and qualitative measures. Educational levels adequate under current conditions for entry level employment were determined.

Results indicated a population of 1,427,448 adult Alabamians who were described as lacking or deficient in the skills necessary for employability. The literacy level of Alabama's workers was postulated to effect the state's ability to retain existing business and industry and/or to attract new business and industry. Social costs associated with low worker literacy included such conditions as low birth weight babies, high infant mortality, child death, high teen violent death rates, and high rates of teen pregnancy and crime. Needs that, if met, would positively and significantly impact the state's economy and future were identified. Future research needs were identified.

Significant problems exist for Alabama in terms of worker illiteracy. These problems adversely impact the state's economy and the social conditions within the state.

3:00 p.m.-3:50 p.m. **MATHEMATICS EDUCATION**
(Discussion Session)..Ridgelake

PRESIDER: Linda Barron, Vanderbilt University

IMPLEMENTING THE NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS CURRICULUM AND EVALUATION STANDARDS: EVALUATION OF A TEACHER TRAINING MODEL

Regina Halpin, Mississippi State University

Since the dissemination in 1989 of the National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards, teacher education programs have been revised to reflect the national mathematics education reform movement. As a result, many new teaching innovations have been developed based on the constructivist philosophy. Consequently, questions have been asked concerning the impact of the change on the training of future teachers. This study was timely because the research supported that a constructivist approach in the classroom provides students an opportunity to explore and discover the meaning of mathematics. However, it has become important to evaluate today's teacher education programs to determine the effectiveness of revised program components on producing elementary teachers who understand the constructivist theory and, as a result, become more confident in their ability to teach elementary mathematics.

The research questions for this study focused on determining if the constructivist-based teacher training model contributed to an increase in preservice elementary teachers' beliefs in their ability to teach mathematics. The quantitative and qualitative data were collected during two semesters of an interdisciplinary, field-based block of methods courses taken by 73 preservice elementary teachers prior to student teaching. A paired sample t-test was used to test the null hypothesis that there was no difference in the preservice elementary teachers' pre- and post-ratings of their belief in their ability to teach mathematics. On a scale of 1-5 (1 being lowest), the pre-average rating of the preservice teachers' belief in their ability to teach mathematics was 2.86 with a standard deviation of 1.11 as compared to a post-average rating of 4.01 with a standard deviation of .69. A significant difference was found, and the null hypothesis was rejected (t-value of 8.98, < .001). Content analyses were conducted to categorize the preservice teachers' responses supporting their beliefs.

EFFECTS OF INTERSPERSING BRIEF AND EASY MATH PROBLEMS ON A COMPUTER MATH ASSIGNMENT

Gregg A. Johns and Christopher H. Skinner,
Mississippi State University

The purpose of the study was to examine the effects of interspersing brief and easy math problems (1 digit x 1 digit multiplication) with instructional level problems (2 digit x 1 digit multiplication) on an experimental computer math task with four high school students with specific learning disabilities in math. Experimental sessions were conducted three times per week with two 10-minute trials per session in the students' math classroom. The students were presented a concurrent choice of instructional level-problems with interspersal (independent variable) and instructional-level problems without interspersal. The students were presented with two math assignments presented simultaneously and were asked to choose the problem they wished to compute. The unchosen problem was removed from the screen after a choice was made. The primary dependent measure was the percentage of trial time students allocated to the left screen problem choice.

An experimental single-subject multiple baseline A-B-C-B reversal design was used. Data were analyzed both graphically and using nonparametric repeated-measures procedures for treatment phase means. A statistically significant mean phase difference was found on omnibus measures (p<.05), suggesting a statistically significant mean difference trial time allocated to the left screen math assignment.

Nonparametric follow-up procedures indicated that the students allocated a statistically significantly greater percentage of mean phase time to the interspersal assignment choice as predicted by the matching law during the first B Phase as compared with the C Phase. Visual data analysis also revealed trends that were consistent with matching law predictions.

EFFECTS OF A RESIDENT MENTOR TEACHER ON STUDENT ACHIEVEMENT IN MATHEMATICS

Cynthia W. Wilkins, Rankin County (MS) Schools

The purpose of this study was to determine the effects of a resident mentor teacher on student achievement in mathematics. Measures of achievement were obtained from ITBS Performance Assessment scores from a sample of 991 eighth-grade rural and suburban school students in 1994, 947 eighth-grade rural and suburban school students in 1995, and 976 eighth-grade rural and suburban school students in 1996. Achievement was measured in the areas of Computation and Estimation, Measurement, Problem Solving and Reasoning, and Graphing.

One seventh-grade mathematics teacher from a rural school and one seventh-grade mathematics teacher from a suburban school volunteered to receive instruction from the researcher in performance teaching and analysis and in the creation and use of rubrics. One teaching unit was prepared by the researcher presented to the teachers. Using this unit as a model, the teachers created three more units and trained teachers in their local schools in performance instruction and assessment. Independent t-tests of mean ITBS scores showed no statistically significant prior differences (p<.05) in knowledge in any subtest for the rural school, but the treatment suburban school mean scores were statistically significantly different from the control school mean scores in all areas. Simple analysis of variance using 1995 mean scores as a covariate revealed that mean score differences in both treatment schools were statistically significantly higher in graphing and computation. Mean score differences in the rural schools were not statistically significantly different in problem solving. All schools showed a statistically significant decrease in mean scores in measurement.

It can be concluded that utilizing a mentor model where a master teacher trains resident mentor teachers results in higher mean scores. The paper included additional evidence that the model helped to increase student interest levels in mathematics and increased teacher enthusiasm for teaching.

3:00 p.m.-3:50 p.m. **EXCEPTIONAL EDUCATION**
(Discussion Session)..Players

PRESIDER: Shelia Bassoppo-Moyo, The University of Memphis

ANALYSIS OF IMPARTIAL DUE PROCESS HEARINGS: IMPLICATIONS FOR EDUCATORS

Qaisar Sultana, Eastern Kentucky University

The purposes of the study were to: (1) identify the issues addressed at the due process hearings in this southeastern state, (2) note the ruling of the hearing officers on each issue, and (3) examine the implications for educators. Due process hearing decisions rendered since 1994, a total of 31, were reviewed. Issues for which each due process hearing was requested were noted.

The frequency of each issue was computed. This resulted in 10 categories that were rank ordered by frequency. Rulings of the hearing officers were noted. The percentages of the rulings in which school districts were found to be out of compliance with the Individuals with Disabilities Education Act and/or the state laws and regulations were computed.

Results showed that placement was the most common issue for which a due process hearing was called. The second most common issue was the individualized education program. This was followed by evaluation, private schooling, implementation of a behavior modification program, least restrictive environment, free appropriate public education, suspension/expulsion, child find, and compensatory education. The rate of non-compliance by school districts found by the hearing officers was 87%.

The results have significant implications for educators. The Individuals with Disabilities Education Act mandates major decisions, i.e., identification, evaluation, free appropriate public education, individualized education program, and placement with regard to the education of students with disabilities to be made by a committee consisting of school principal (committee chair), teachers, and parents. The school principal and the teachers, particularly the special education teachers, are the key members of the committee. Compliance with the laws is dependent on their knowledge of the laws and associated regulations. Educators can make appropriate modifications in teacher and administrator preparation programs based on the results of this study.

NEW HOPE FOR CHILDREN WITH CEREBRAL PALSY

John Obringer, Mississippi State University

The purpose of this study was to conduct a complete review of the literature related to the physically disabled student on an experimental therapy specifically for students with cerebral palsy in order to inform concerned parents and special education teachers of a unique drug therapy. Botulinum Toxin Type A (Botox) has recently been tried on a sizable number of cerebral palsy students in a clinical setting to reduce dystonic movements.

Botox, a poison, was injected in extremely small amounts into affected muscles. Although complex, the end result was that it blocked nerve impulses to relax the muscle and relieve the spasm. The first clinical trials look very promising for individuals with dystonic cerebral palsy. A complete review of the literature and an interview with a pioneer of this breakthrough at the Cleveland Clinic was conducted.

If the treatment remains as promising as the first trials indicate, a number of students with cerebral palsy may participate in a full inclusion class vs. remaining in a self-contained classroom setting. Side effects and other related issues were discussed. Handouts and other visual aides were included.

THE EFFECTS OF STRATEGIC INTERVENTIONS USED IN THE CLASSROOM ON A CHILD WITH ADHD

Crystal C. Wiggins and Patrick Kariuki,
Milligan College

The purpose of this study was to investigate the impact of four strategies of environmental manipulations, curriculum modifications, behavior management, and affective attitude considerations on an ADHD child. The four strategies were then divided into two clusters of strategic interventions to investigate the effects of the behavior and academic performance. The first cluster consisted of: (1) seating the student in front of the room with a peer, (2) assigning a peer tutor to work directly with the student and model appropriate behaviors, (3) giving tangible rewards such as candy and stickers, and (4) talking to the child in a positive manner when an off-task behavior occurs. The second cluster consisted of: (1) seating the student in a desk by himself in front of the classroom, (2) allowing more time for assignments to be completed, (3) giving intangible rewards such as positive praise, and (4) use of more nonverbal cues when signaling an off-task behavior.

The study was conducted over two six-week intervals. The data from this study were collected using interviews with parents, discipline reports, math grades, evaluation of portfolio, trips to office, and documentation of the child's behavior each day in class.

The data were analyzed using measures of central tendency and graphic representation of weekly math grades and behavior in the class. Results indicated more improvement in grades and also in positive behavior when the first strategic cluster was used than when the second cluster was used.

3:00 p.m.-3:50 p.m. **PROFESSIONAL DEVELOPMENT**
(Discussion Session)..Missouri

PRESIDER: E. Jean Newman, University of South Alabama

A COMPARISON OF TEACHERS' AND PRINCIPALS' PERCEPTIONS OF FACTORS AFFECTING PROFESSIONAL LEARNING

Laurie J. Leonard, Louisiana Tech University

The current epidemic of whole-school reform initiatives is characterized by concerted efforts to institutionalize school-site actor collaboration. The high involvement of teachers and administrators in identifying goals, addressing problems, and formulating strategies is widely considered to be a key element of schools distinguished by the level of professional development necessary to positively influence student achievement. When such collaborative processes are intended to further teacher professional growth, however, they may be impeded when those involved have different perceptions of stimuli for learning as well as of those factors internal and external to the school that influence that teacher learning. While the consequences of dissimilar stimuli and conditions for professional development may be largely self-evident, empirical research to accurately report its nature and extent has been sparse.

Taken from the perspective of a model of "organizational learning," this research examined the congruencies and the disparities evident between the reported perceptions of teachers, on the one hand, and those of their principals, on the other. If organizational learning holds promise as a means by which schools are able to improve student outcomes through professional growth, it must be determined if the perceptions of those school and environmental factors are shared by both staff and administration. Commonalities of understanding are likely to confirm the accurate depiction of actual conditions, while incongruities might signify diminished opportunities for learning.

Data collection was undertaken using qualitative methods; semi-structured interviews were conducted with a total of 15 representative teachers and each of the principals at three selected schools. Questions directly addressed both in-school and out-of-school factors believed to stimulate professional learning and to mediate its maintenance. Multiple coders were used to establish accuracy and reliability of categorization and interpretation of the data. Each case school's data were analyzed separately and then combined for comparison purposes.

The results provided considerable insights not only in terms of similarities and differences between the teachers and principal within any particular school, but also with respect to variation among the schools. For instance, the professional staff at one school was shown to share considerably more common perceptions than did the others. For the purposes of establishing schools as "learning organizations," this strongly suggested the need to be defined in reality in terms of common--and even uncommon--perceptions.

THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA'S PROFESSIONAL DEVELOPMENT SCHOOL EXPERIENCE: YEAR II EVALUATION

Cynthia M. Gettys, Barbara M. Ray, Barbara Wofford, Kathleen Puckett,
Douglas Kingdon, Jeanette Stepanske, and Caryl Taylor,
The University of Tennessee, Chattanooga; and Karla
Riddle and Joy Black, Hamilton County (TN) Schools

This study investigated perceptions of university students toward the Professional Development School Experience (PDS), an early field placement program, during its first two years of implementation at a southern metropolitan university. The purpose of the study was to compare the attitudes of three groups involved with the PDS experience. The preservice PDS students, the university faculty teaching at the PDS, and the PDS site administrators perceptions were analyzed in the following areas: curriculum and planning for teaching, roles of the program participants, University-PDS relationships, and program perceptions.

A color-coded, 30-item questionnaire was completed by 126 PDS students, four PDS site-based administrators, and six PDS university professors. Data were collected from 100% of the PDS program participants. Additional qualitative data were gathered through open-ended questionnaires, interviews, and summary reflection papers that were written by the university PDS students.

Data analysis involved the application of descriptive statistics, the use of the correlated T test, and ANOVA. Preliminary findings indicated strong support for the PDS experience. Differences approaching statistically significance were found between the perceptions of the PDS university students and the PDS university professors regarding the PDS university professors' relationships and involvement with the PDS experience.

CLINICAL MASTER TEACHERS: AN ALTERNATIVE TO THE TRADITIONAL TRIAD OF SUPERVISION

Liza Wilson, The University of Alabama, and Amany I. Saleh,
Arkansas State University

Traditionally, student teaching programs have used a triad supervision model which involves the student teacher, the school-based cooperating teacher, and the university- based supervisor. However, the professional literature recognizes deficiencies in this model. This paper described an alternative model to supervision that teams Clinical Master Teachers who combined the traditional roles of the cooperating teacher and the college supervisor. Specifically, the authors examined the changes in perceptions and beliefs of three secondary teachers as they participated in their first year of the program and the changes these teachers made in their supervision and professional development. The authors also studied the student teachers' attitudes towards the traditional model of supervision and the Clinical Master Teacher model.

Participants in the study were divided into two groups: the first group included experienced teachers who had served as cooperating teachers in previous years and had participated in the CMT program for the first year; the second group included student teachers who had split placement between the traditional supervision model and the CMT program. The participants were interviewed and were asked to answer a questionnaire designed to elicit the changes in their attitudes, perceptions, and beliefs regarding different aspects of teaching and supervision.

Results indicated that teachers demonstrated a dramatic change in their beliefs and perceptions of their role as supervisors. Participation in the CMT program seemed to empower and raise the confidence of these teachers regarding supervision. Student teachers exhibited significantly more positive attitudes towards their experiences in the CMT program than their experiences in the traditional supervision model.

3:00 p.m.-3:50 p.m. **BASIC SKILLS (Discussion Session)**.......................... **Parlor 104/106**

PRESIDER: Gahan Bailey, Louisiana Tech University

GETTING STUDENTS INVOLVED IN NOTE TAKING: WHY PARTIAL NOTES BENEFIT LEARNERS MORE THAN COMPLETE NOTES

Andrew D. Katayama, Southern Illinois University--Edwardsville

The purpose of this study was to investigate the effects of three quantities of notes (complete, partial, and skeletal) on factual and transfer learning. The use of complete notes have been previously studied and have shown advantages for spatial displays over linear displays on transfer tests. Less research has investigated partial and skeletal type of notes. In this study, partial study notes provided students with headings and subheadings of major concepts within the text. They also provided approximately half of the information, which served as examples or cues for students to follow as they completed their notes. Skeletal notes, on the other hand, required more activity from the students as only the headings and subheadings were provided along with the categories that required students to search for all the relevant information. Previous research has suggested that the more personalized notes become, the greater the retention of information.

One-hundred-seventeen undergraduate students at a large state university in the deep south participated in this study in exchange for extra credit. Students were randomly assigned to one of the six conditions. A six-page, single-spaced, chapter-length text on sleep disorders was used with a set of graphic organizers and outlines in complete, partial, and skeletal format. The study took place in three days. During the first two days, students read, completed, and studied their notes. On the third day, students reviewed their notes before engaging in a factual and transfer test to assess their learning.

An analysis of variance (ANOVA) was used to analyze the data. There were no differences found on the factual test. The transfer test, however, did show an advantage for partially constructed notes over complete notes. Therefore, it was concluded that, on transfer tests, students benefit more from partial notes than from complete notes.

USES OF THE IOWA TEST OF BASIC SKILLS IN A RURAL, ETHNICALLY DIVERSE ELEMENTARY SCHOOL

J. Mitchell Shelburne and J. Reid Jones,
Delta State University

The purpose of this study was to evaluate the Iowa Test of Basic Skills (ITBS) in a rural, ethnically diverse, southeastern setting. While national and state norms were available for the test for the ITBS, there was still a need to demonstrate both the validity and stability of this test in the present setting. Further, test scores were used to compare students selected for enrichment courses with other students.

ITBS scores and year-end averages for language arts and mathematics were collected for a cohort of 76 students at the end of the third, fourth, and fifth grades. Subjects were all enrolled in a single elementary school where approximately 50% of students in each grade was African American. Additional information included ethnicity, sex, socioeconomic factors, and enrollment in enrichment curricula. Significant correlations ($p < .01$) were demonstrated between Language Arts Grades (LAG) and the ITBS Reading Scores ($r=.57$). LAG were also significantly correlated with ITBS Language Scores ($r=.55$). Similarly, Mathematics Grades (MG) were correlated with ITBS Mathematics Scores ($r=.59$). A multivariate analysis comparing Enrichment Group Students with Other Students yielded a significant Pillai Bartlett Trace ($p<.001$). Each univariate grade and ITBS score comparison between these groups was also significant ($p<.01$), providing a measure of known-groups validity. All ITBS scores were significantly correlated through the three years of data collection, indicating substantial stability. Scores for this sample were compared with statewide data on the use of the ITBS.

STUDY SKILLS MEASUREMENT: CHOOSING THE MOST APPROPRIATE INSTRUMENT

Rose M. Turnbough, Mammoth Spring High School (AR),
and Nola J. Christenberry, Arkansas State University

Concerns related to student achievement are rampant, and educators nationwide experience pressures from many directions to improve the quality of education. One point of focus with some educators has been the strengthening of students' study skills. Choosing an appropriate measure of study skills is a requisite in high-quality programming, but the information about such tools is limited.

Buros' Mental Measurements Yearbooks, Tests in Print, test publishers' catalogs, and the ERIC databases were reviewed to identify available study skills measures. These measures were then compared in terms of standard psychometric properties to determine salient features of each measure.

Based on this comparison, recommendations were offered regarding the relative usefulness of the measures. Within the recommendations, three categories of measures were considered: measures that have a long, but dated history; measures that are in current use, with varied histories; and measures that are recent releases with limited histories.

4:00 p.m.-4:50 p.m. **TEACHER EDUCATION (Discussion Session)................. Arkansas**

PRESIDER: Warren A. Land, Mississippi State University

AN EVALUATION OF TWO DIVERGENT MODELS FOR SUPERVISING STUDENT TEACHERS

Melina Vaughan and Linda T. Jones,
Mississippi State University

This study examined the traditional triad model of supervising student teachers and an alternative approach to supervision called the clinical instructor program. A review of the literature indicated that the most frequently used method of supervising student teachers is the triad model. In this model both the public school supervising teacher and the university supervisor assess the performance of student teachers during their internship. Criticism of the triad model, shortage of faculty members to supervise student teachers, and the call to involve classroom teachers in teacher education programs led to the development of the clinical instructor program. In this alternative approach, highly competent classroom teachers assume responsibility for supervision and evaluation of student teachers. They form grade span teams and work with a cohort of student teachers as well as conduct biweekly seminars.

Quantitative and qualitative methods were used to evaluate both approaches. Student teachers who participated in each supervision model completed an evaluation composed of items on a Likert-type scale and open-ended questions. Teachers participating as clinical instructors evaluated the program by completing a 21-item questionnaire and providing narrative feedback on selected aspects of the program. The complete findings from this study of two different models for supervising student teachers were presented.

PERCEPTIONS OF THE FIELD EXPERIENCE: A DIALOGUE BETWEEN STUDENT TEACHERS AND ENGLISH METHODS STUDENTS

Sue S. Minchew, Mississippi State University

This qualitative study sought to determine the perceptions of 14 student teachers about their field experience, about their university preparation for that experience, and about their own abilities as teachers. Data were collected over two semesters by the professor and her students in two English Methods classes. Together the students and professor wrote protocol questions for interviews with student teachers who were currently teaching secondary English classes. The questions explored practical considerations relative to planning time, teaching strategies, and classroom management, as well as the student teachers' reflections about their own abilities as teachers. The student teachers were also asked whether they felt that their university instruction had adequately prepared them for classroom teaching.

With their professor serving as facilitator and observer, the methods students conducted audio-taped interviews of the student teachers in discussion groups during their regular class time. Subsequent to the interviews, both the professor and the methods students wrote reflections about insights gained from the process.

An analysis of the interviews indicated that the student teachers felt inadequate or poorly prepared in two areas: classroom management and grammar instruction. In general, however, they believed that the student teaching experience had increased their confidence in their skills as teachers. Likewise, in reflecting on the interviews, the methods students remarked that the shared experiences made them less anxious about their subsequent student teaching assignments.

Information gleaned from the study should be beneficial to professionals involved in preparing preservice teachers for the classroom. It should be of particular interest to professors in English Education.

SENIOR EDUCATION MAJORS' PERCEPTIONS OF PRESERVICE EXPERIENCES

Arlene Adams and Jessie Brown, Coastal Carolina University

As the education program at this university adapts to the needs of a rapidly-changing five-county service area, it has become necessary to examine the effectiveness of various elements and innovations in the program. One measure of the effectiveness of the program has been the perceptions of the seniors as they have proceeded through the methods semester and embarked on their student teaching internship. This study was designed to survey elementary and early childhood education majors in the first semester of their senior year for their perceptions of a variety of elements of the education program.

Approximately 50 seniors completed the survey twice, once in the first week of the semester and once in the last week. The survey consisted of 51 questions dealing with students' confidence levels about various elements of the program, perceived levels of skill with those elements, and perceived value of various experiences that are required or optional in the program. The survey format allowed an examination of the value of early program experiences, the benefits of the experiences in the senior methods courses, the differences between students who had only experiences at this university and transfer students, and areas that were still lacking as the education majors move into student teaching.

The data were analyzed by multiple regression. Results showed that several elements of the program, including assessment techniques and the uses of technology, were particularly beneficial in the senior semester. Early beneficial experiences included methods for children's literature and practica. Experiences that were still lacking at the end of the senior semester included special education teaching strategies.

On the basis of the survey results, several recommendations were made for further changes in the education program. An additional measure of the seniors' achievement in the areas of concern has been planned for future investigation.

STUDENT TEACHER EXPECTATIONS OF CHILDREN'S BEHAVIORAL AND ACADEMIC PROBLEMS BEFORE AND AFTER THE STUDENT TEACHING EXPERIENCE

Gahan Bailey, Louisiana Tech University, and Robert Fontenot,
The University of Southwestern Louisiana

Teacher educators and students consider the student teaching experience to be one of the most important components of the teacher preparation program. The student teaching experience gives the teacher candidate an opportunity to respond appropriately and effectively to various behavioral and academic problems encountered during the schooling process.

The purpose of this study was to obtain a comparison between perceived and actual behavioral and academic problems experienced during student teaching. The Student Teacher Problem Frequency Inventory (STPFI) was administered to 187 elementary and secondary student teachers at two universities, one in South Louisiana and one in North Louisiana. Prior to student teaching, students indicated on a four-point scale the frequency of perceived difficulty with each problem listed on the survey. At the conclusion of the student teaching experience, the participants indicated on the STPFI the actual frequency of problems they experienced.

Three sets of analyses were performed: (1) frequency distributions for each statement separately, as well as for the net difference in responses between the before and after administrations, (2) t-test procedures, and (3) Pearson correlation coefficients. In most areas of behavioral problems, the student teachers did not anticipate having serious difficulties; exceptions appeared to be the problems of "talking out of turn" and "general classroom disruptions." Student teachers anticipated problems in the academic areas such as "failure to turn in homework" and "staying on task." Comparisons of pre- to post-student teaching responses revealed a number of instances where statistically significant shifts in perception occurred.

4:00 p.m.-4:50 p.m. **LEARNING STYLES (Discussion Session)..................... Ridgelake**

PRESIDER: Christine E. Daley, University of Central Arkansas

THE ROLE OF LEARNING STYLES IN FOREIGN LANGUAGE ANXIETY

Phillip Bailey and Christine E. Daley, University of Central Arkansas,
and Anthony J. Onwuegbuzie, Valdosta State University

Foreign language anxiety has been found to be a multidimensional phenomenon comprising three components: communication apprehension, test anxiety, and fear of negative evaluation. This study of 146 university students attempted to identify a combination of learning modalities that might be correlated with these three components. Canonical correlation analyses revealed that students who preferred to learn in informal classroom settings, who were not self-motivated, who were neither persistent nor responsible in attempting assignments, who were non-authority-oriented learners, who did not like to receive information via the auditory or kinesthetic mode, who required nutritious food breaks while learning, and who did not prefer to undertake difficult tasks in the morning, tended to have higher levels of communication apprehension, test anxiety, and fear of negative evaluation. The educational implications of these findings for understanding foreign language anxiety and for increasing foreign language learning were discussed, as were suggestions for future research.

A CROSS-CULTURAL ANALYSIS OF COGNITIVE LEARNING STYLE PREFERENCES OF NATIVE AMERICAN, AFRICAN AMERICAN, MEXICAN AMERICAN, RUSSIAN, AND CAUCASIAN SECONDARY STUDENTS IN GRADES 9-12

Jacqueline F. Nuby, University of Montevallo

The purpose of the study was to investigate cross-cultural differences in the learning style preferences of Native American, African American, Mexican American, Russian, and Caucasian secondary students in grades 9-12. Gender differences were also explored.

The Myers-Briggs Type Indicator was administered to approximately 100 secondary students in each cultural group. The Myers-Briggs Type Indicator classifies individuals into one of 16 personality types that is indicative of learning style preferences. To determine differences and similarities, SRTT tables were created. Chi-square calculations were computed. The criterion for significance was $p<.05$.

A comparison of the learning style preferences revealed significant differences in the preferences of each cultural group. The findings were consistent with the literature relating to the cultural differences in learning style as well as differences according to gender. There is much evidence that one's cognitive style is directly tied to the culture in which one is immersed. The way cultural groups communicate as well as perceive and process information is directly related to the culture in which one is immersed.

Knowledge of particular learning styles and the culture in which they predominate has become of vital importance to instruction as the teacher seeks to influence and stimulate student learning. A discussion followed on instructional strategies geared to differences in learning style. Strategies included activities based on multiple intelligences, cooperative learning strategies, as well as whole-group instructional techniques.

THE EFFECTS OF CHESS INSTRUCTION ON STUDENTS' LEVEL OF FIELD DEPENDENCE/INDEPENDENCE

James P. Smith, Grambling State University, and Monty E. Sullivan,
Louisiana State University at Eunice

As doors of opportunity are opening for minority and female students, many students are encountering difficulty succeeding in science- or mathematics-intensive fields. A possible link is the Field Dependence (FD)/Independence (FI) construct (Witkin, 1962). FD/FI is a construct related to a "global versus an analytical way of perceiving, and entails the ability to perceive items without being influenced by the background" (Chinien & Boutin, 1993). Chinien and Boutin reported that FD individuals tended to be people-centered and less analytical, while FI individuals were much more analytical but lack social skills (1993). Research also has indicated that FD was more common among minority and female individuals (Ley, 1996). Chess instruction was chosen for its proven qualities for improving math scores (Van Zyl, 1991) and its analytical requirements. Determining how to assist FD students in reaching an acceptable balance was the general topic of this research.

The purpose of this research was to determine if chess instruction would change the level of a students' FD status as determined by the Group Embedded Figures Test (GEFT). This was accomplished by comparing the results of pre- and posttest scores on the GEFT for a class of high school Humanities students who had received approximately 50 hours of chess instruction. The null hypothesis was that there was no significant difference between the group mean score of the GEFT administered before chess instruction compared to the group mean score after instruction. The calculated t-value was significant at the .05 level. Therefore, chess instruction was determined to have a significant effect on GEFT scores.

Based on this research, development of instructional modules that help students strike a balance on the FD/FI scale should be strongly considered as a means of supporting more minorities and females in math- and science-related fields.

4:00 p.m.-4:50 p.m. **RESEARCH METHODOLOGY**
(Discussion Session)..Players

PRESIDER: J. Jackson Barnette, Independent Consultant

INCORPORATING COMPUTER TECHNOLOGY IN QUALITATIVE RESEARCH

Randall Parker, Louisiana Tech University

Recent technological advances and the increasing availability of technology to researchers and evaluators have had a substantial impact on the use of technology to manage and analyze large amounts of qualitative data. It is important for researchers to understand and utilize the technology available for use in their data analysis. This position paper provided an overview of the emerging uses of computers in qualitative data analysis and a rationale for improving the computer competencies of qualitative researchers. Programs for both IBM and Macintosh platforms were identified, and the uses of computers for word processing, data coding, indexing, sorting, and retrieval on both mainframes and PC's were reviewed and discussed.

The presentation also addressed the potential pitfalls and limitations of using computers in qualitative research. These included (1) researcher attitudes toward use of computers, (2) problems with data retrieved out of context, (3) decisions of software selection, (4) inappropriate use of computers in analysis, and (5) the learning curve necessary to become proficient with technology versus the time needed to analyze data without technology. Participants were provided with strategies for initial organization of data, ways to avoid inappropriate analysis, and steps in the development of divergent thinking in qualitative data analysis. A resource guide to assist in the selection of various software packages was included as an appendix.

It is incumbent on researchers to consider the appropriateness and usefulness of computers in data analysis. Only by understanding the broad range of common functions and unique features of computers, while at the same time being aware of the dangers of too much reliance on technology, can researchers truly make informed choices regarding methods of analysis.

E-MAIL VERSUS TRADITIONAL RESEARCH CLASSES

Robert L. Kennedy, University of Arkansas
at Little Rock

The purpose of the study was to compare electronic mail and more traditional "chalk and talk" approaches for teaching graduate introductory research classes. The electronic course was first offered in the Spring of 1995 with the Spring 1997 semester being the most recently included. There were 73 participants in the electronic classes and 35 in the traditional classes, with a demographic majority of white females enrolled in graduate education programs. Multiple-choice pretests and posttests were given, similar in format to the regular tests administered to both groups as part of their course grades.

An analysis of covariance (ANCOVA) was run using posttest scores as the response variable and pretest scores as the covariate. Because the ANCOVA technique involves features of both the analysis of variance and regression, assumptions for both were tested using the NCSS statistical program, version 6.0.21. The assumption of random selection is not practical for most courses, but the two groups were demographically comparable. Normality and homoscedasticity across all groups were verified using the Omnibus Normality of Residuals and Modified-Levene Equal-Variance tests. Homogeneity of regression was observed in scatterplots of both pretests and posttests and their trend lines. Therefore, the assumptions required for ANCOVA seemed to be reasonably well met.

The test indicated that the null hypothesis of no statistically significant difference between the traditional (adjusted mean of 12.49, $n=35$) and electronic (adjusted mean of 12.10, $n=73$) classes' scores could not be rejected at the 0.05 level [$F(1,105)=0.91$, $p=0.34$]. It was concluded, then, that offering the course through electronic mail did not appear to hinder the performance of the students, to the extent measured by the multiple-choice tests, suggesting that the electronic course offering provided a flexible alternative for learning, possibly with some nonacademic advantages over the traditional approach.

TEACHING AND LEARNING EXPERIENCES WITH INDEPENDENT PROJECTS IN THE GRADUATE STATISTICS CLASSROOM

Ann Aileen O'Connell, The University of Memphis

For graduate students in education or the social sciences, courses in statistics are often perceived as an intimidating requirement of their degree program. Yet, they are generally required to complete a culminating master's or doctoral level project (thesis or dissertation) that involves some degree of statistical sophistication. One challenge to the statistics educator is how to focus course content in introductory courses to allow students to successfully achieve this long-term goal while also fostering an appreciation for statistics.

The purpose of this paper was to present the use of independent course projects by a statistics instructor at a Mid-South college of education. During two recent semesters, 50 individual projects were completed. Students were asked to complete a questionnaire regarding their experiences with the course and the projects. Results indicated that students felt more comfortable with statistics than they had expected, and that the project made the course more meaningful.

Statistical educators have emphasized the need for more authenticated assessment of student learning in statistics, and for identifying what we truly want our students to be able to accomplish as a result of their participation in a statistics course. According to Garfield, "Students learn to value what they know will be assessed" (1995, p. 32). As statistical educators, we need to think very clearly about what it is we want students to value, and structure our courses to coordinate assessment with the learning of these important skills. Independent projects offer students an opportunity to engage in the kinds of activities we would like them to be competent in, and to receive constructive feedback about their research efforts and statistical knowledge before they reach the critical thesis or dissertation stage of their education.

4:00 p.m.-4:50 p.m. **CULTURE (Discussion Session)....................................Missouri**

PRESIDER: Diane Green, Mississippi State University

NO LANDS MAN--AN ETHNOGRAPHIC STUDY OF THE MISSISSIPPI BAND OF CHOCTAW INDIANS

Kathy Post, The University of Memphis

The purpose of the study was to review published literature regarding the political, economic, and educational developments of the Mississippi Band of Choctaw Indians. Historical literature was scrutinized for references to the contributions of the Choctaw Indians in relation to economic, political, geographic and cultural development in the Mid-South region of the United States.

Government documents, treaties, and historical commentaries were reviewed for pertinent information. Publications and papers from the Mississippi Band of Choctaw Indians tribal archives were also included in the review.

Contemporary articles and publications were examined to provide information concerning the tribe's most recent developments and achievements. Bulletins and publications from the Bureau of Indian Affairs and the Mississippi Department of Education were utilized to compare the Mississippi Band of Choctaw Indians' tribal education programs and funding provisions to those of other BIA supported schools, as well as state funded public schools in Mississippi.

The review of the literature regarding the Mississippi Band of Choctaw Indians has indicated a socioeconomic connection between tribal leadership, economic development, and improvement within the tribal school system.

CAN RESEARCHERS AND PRACTITIONERS TALK OPENLY ABOUT RACE?

Ira E. Bogotch and Linda Tillman, University of New Orleans

MSERA is an appropriate forum for researchers and practitioners to discuss specific educational issues affecting its member states in the Mid-South region of the United States. One of the most persistent and insidious issues is race and how it has negatively impacted on the quality of southern public schools. There are seething resentments on all sides of the issue. Within a modernist perspective viewing history as progress, much of the resentment stems from perceptions that we have tried various solutions [e.g., Brown and busing, compensatory programs, affirmative action, and so forth], which have not worked; instead, for many, things [i.e., relationships and material realities] have gotten worse, not better; therefore, race is an intractable social problem and a forbidden topic of discussion.

This proposal challenged modernist perspectives in a discussion forum for both educational researchers and practitioners. They conducted a structured conversation [i.e., an interactive format] that addressed: (1) the pertinent literatures outlining historical [e.g., segregation-integration-resegregation policies and practices] and theoretical perspectives as well as their underlying assumptions, and (2) potential research questions utilizing both (a) lived experiences of participants, and (b) hypotheses testing designs. Under the above headings, conversation was delimited to the following theoretical and design issues: the concept of race versus ethnicity; race as a socially constructed concept; modernist (commonalities) versus postmodernist (differences) perspectives; and sampling methods versus storyline interpretations. At each juncture, audience participation was used to make connections and see "things" differently.

In the final segment, the researchers talked openly about the obstacles to conducting research on racial issues ranging from ideological, professional and personal conflicts to pragmatic considerations of reputation, tenure, and funding. It is important to make explicit to both researchers and practitioners the risks and rewards for engaging in this line of inquiry. The researchers stated that the risk was in the submission of the proposal; the reward came from the social interactions that followed.

RACE AND FINANCIAL AID STATUS AS DIMENSIONS OF SELF-ESTEEM AND ATTACHMENT IN AFRICAN AMERICAN AND WHITE FEMALE COLLEGE STUDENTS

Karlin S. Evans, The University of Memphis

This study examined the relationship between attachment and self-esteem among African American and white female college students. Questionnaires were administered to 44 18-25 year-old female college students from an urban southern university. The Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) was used to assess the student's relationships with her parents and close friends, and the Self-Perception Profile for College Students (Neemann & Harter, 1986) was used to measure judgments of competence in 13 domain-specific subscales. Pearson product-moment correlations were computed among the three attachment variables and the 13 self-esteem domains. Results indicated statistically significant associations between attachment to mothers and global self-worth, and attachment to fathers and job competence, close friendships, and romantic relationships.

In order to assess the dimensions of race and financial aid status, as an indicator of socioeconomic status, ANOVA's were conducted. Findings indicated a significant relationship between attachment to fathers and race with African American respondents reporting lower levels of attachment to fathers. Further results indicated a significant relationship between parental relationships and receiving financial aid with those students receiving no aid reporting higher levels of competence in terms of parental relationships. Findings further noted a significant relationship between attachment to mother and receiving financial aid with those females receiving no financial aid reporting stronger attachment to their mothers. Results were consistent with previous research indicating a positive relationship between self-esteem and attachment in female college students.

9:00 a.m.-10:50 a.m. **ADULT LEARNING (Training Session - 2 hours)..............Louisiana**

ADULT LEARNERS - RECLAIMING A SOCIAL VOICE FOR CIVIC ACTION

Vincent R. McGrath, Mississippi State University

We are bound by our language and group behavior, according to leading social theorists. Adult learners find themselves at times rigidly framed by it. If educators had a reference point from which to judge and weigh the capacity of the individual to increase her mental and social growth, then they would create more creative learning environments than now exist. By recognizing those constraints that inhibit new or different ways of behaving and thinking, educators can then assist learners overcome the barriers that reduce their voices, claims, and questions about their complex worlds and increase their learning potential.

The trainers, using current social science theory, discussed the stages of intellectual development and the social constraints that inhibit productive and cooperative civic activity. Also, they reflected on the methods that educators may use to assist students develop authentic voices through rhetorical claims, questions, and justification in real social argumentation. The goal was to have a dialogue about how this understanding may serve to increase cooperative behavior and social action, reduce verbal or physical violence, and lead to positive group consensus. The presenters demonstrated how constructive social argumentation serves adults challenged by new but potentially threatening concepts and viewpoints.

The presenters provided a package of materials and other documents as exemplars for educators interested in this aspect of education. If the adult learners, immersed in particular social environments, can transform, synthesize, and internalize new knowledge and change the quality of their personal and social lives, they must be offered serious reasons for such change, discussed and practiced in safe learning environments with trusting educators, who know the psychology of change, but who view the individual's relationship to ideas as an invigorating, worthy challenge.

9:00 a.m.-9:50 a.m. **ENGLISH EDUCATION**
(Outstanding Paper Session)...Arkansas

PRESIDER: LaVerne M. Allen, Jackson State University

WHEN THEY DON'T ALL SPEAK ENGLISH: ADDRESSING WRITING PROBLEMS IN MULTILINGUAL PEER RESPONSE GROUPS

Patricia B. Wachholz, Lane College

Recently, there has been increased awareness of the potential of collaborative learning. In writing classrooms, collaborative learning techniques, like peer response groups, have become commonplace in native language classes and are increasingly accepted in English as a second language (ESL) instruction. Because little research exists examining what occurs in ESL peer response groups, a number of questions persist, especially regarding groups within bilingual and multilingual classrooms. Hence, this study explored the following questions: (1) How do writing groups function in a multilingual classroom; what kinds of responses do students in such groups give to and receive from one another? and (2) Based upon peer suggestions, do students make changes in written products, and how do they determine which suggestions to accept or eject?

This study examined how peer response groups functioned in a linguistically diverse college freshman composition class. It presented a detailed look at problem identification and resolution strategies of writers in multilingual peer response groups by exploring communication patterns during group sessions, ways students identified and resolved writing problems in a group context, and ways group dynamics affected problem-solving strategies. Data were collected via audio- and videotaped peer "responding-to-writing" sessions, open-ended response sheets, participant observations and interviews, and written journals. Data analysis procedures were a modification of grounded theory analysis, with a methodological impetus toward the development of theory.

Results indicated that peer response groups can benefit writers in multilingual classrooms by expanding the writing audience and helping writers become self-responsive. Nonetheless, students often avoided evaluative talk. Additionally, they sometimes gave bad or incorrect advice or overlooked problems. In short, groups rarely provided the help peers wanted. Findings suggested that, while these problems were apparent with first- and second-language writers alike, second-language students had additional obstacles.

EXTENDING THE EDUCATIONAL COMMUNITY: RESULTS OF AN ELECTRONIC MENTORING PROJECT WITH PRESERVICE TEACHERS

Denise Johnson, University of Central Arkansas

The purpose of this presentation was to describe a project conducted in a reading methods course for preservice elementary teachers to model how technology can be incorporated into the curriculum to facilitate learning as well as provide hands-on experiences with computer applications.

This course is the first of two reading methods courses all students must take to complete elementary certification requirements. Emphasis of the course is on the theoretical foundations of reading instruction. Students enrolled in the class are also placed in an elementary school for approximately three weeks to gain experience working with and observing children and teachers. The instructor of the course requires students to document the instructional methods employed by the teacher observed in order to analyze the theoretical philosophy from which the teacher approaches reading instruction. The instructor recommends that the students discuss the approaches observed with the teacher to gain further insight into her/his philosophy. Often, the time necessary for this important exchange of information is not available. Therefore, a specific goal of this project was to provide an additional avenue for preservice teachers to gain a greater understanding of different philosophies of reading through collaboration with practicing teachers across the country via electronic dialoguing. Each preservice teacher was provided with an e-mail account and the e-mail address of a practicing teacher who volunteered to serve as a mentor.

All of the preservice teachers participated in a training session on how to use e-mail prior to sending their first message. The first message included biographical information and a request for information about the mentor's philosophy of reading. All further correspondence was on the students' own time outside of class. The presentation included specific feedback provided by the preservice teachers and the practicing teacher mentors and outcomes of the project for both groups.

A LONGITUDINAL STUDY OF ELEMENTARY STUDENTS' DEVELOPMENT AS WRITERS

Carolyn Reeves-Kazelskis, University of Southern Mississippi

The study examined elementary students' writing development longitudinally to find out: (1) the levels of writing proficiency attained by students during each school year, (2) the writing characteristics associated with different levels of proficiency, and (3) the factors and conditions that may influence writing quality.

Of the 23 students composing the initial sample, eight participated in the study for its duration, from third through seventh grades. Reduction in the sample size occurred because nine students moved from the school district, and six students chose not to continue in the study after their third or fourth year of participation. Of the eight students (four females, four males) participating in the study for the five-year period, four were African American and four were Caucasian.

The researcher met with students individually once a week to collect writings. Each meeting followed a similar format: (1) the student read aloud each of her/his writings while the researcher listened and made notes about the writing; and, (2) the researcher asked questions about each writing, such as: Why was it written? Did the student enjoy writing it? Was the writing a first daft or a finished product? The amount of time spent weekly with each student varied, depending on how many writings the student had to share and how much discussion was evoked by the writings. Each piece of writing was dated, photocopied, and the original returned to the student. Planned interviews were conducted, periodically, with the students, their parents/guardians, and their teachers.

Each piece of writing was analyzed holistically and analytically. Matrices displaying data obtained from all sources were developed and used to identify patterns emerging from the data. Tentative conclusions were dawn, and attempts to verify conclusions included reexamination of relevant data sources. The findings of the study suggested implications for classroom practice and teacher educators.

9:00 a.m.-9:50 a.m. **EVALUATION**
(Outstanding Thesis/Dissertation Session)..................... Ridgelake

PRESIDER: Michele G. Jarrell, The University of Alabama

PREDICTION OF CAAP SCORES BASED ON ACT SCORES, CUMULATIVE GPAS AND BOTH

Debbie Bryant, University of Arkansas at Monticello

The purpose of this study was: (1) to measure the relationship between CAAP scores and ACT scores and between CAAP scores and cumulative GPAs, and (2) to predict CAAP scores based on ACT scores, cumulative GPAs, and both. The CAAP exam from American College Testing is the mandated "rising junior exam" in Arkansas' public colleges and universities. Students who have earned 45-60 college credits at the freshman-level or above are required to take four modules (writing skills, mathematics, reading, and science reasoning). This study examined the CAAP scores, ACT scores, and cumulative GPAs of 124 students who were tested at a comprehensive, rural Arkansas university in November 1996. All hypotheses were tested individually at the .001 level of significance to achieve an overall significance level of .05.

The study found a significant amount of correlation between ACT scores and the corresponding CAAP scores. There was also a smaller significant correlation between the cumulative GPAs of these students and their scores on each CAAP module. The study disclosed that CAAP scores could be reasonably predicted based on corresponding ACT scores. The best prediction was that for CAAP writing skills based on ACT English. The weakest prediction was that for CAAP mathematics based on ACT mathematics.

Predictions of CAAP scores based on cumulative GPAs were not nearly so strong as those that were based on ACT scores. The study also found a significant amount of predictability between CAAP scores and both independent variables (ACT scores and cumulative GPAs). The study provided overall evidence that student performance on the CAAP exam was highly influenced by performance on the ACT test.

CROSS-DOMAIN MODELING OF ACADEMIC PERFORMANCE IN MATHEMATICS AND HISTORY

Frank Lawrence, Gerald Halpin, and Glennelle Halpin,
Auburn University

The purpose of this study was to demonstrate cross-domain modeling techniques using data collected from courses in mathematics and history at a major southeastern university. Cross-domain models are used to analyze individual change in multiple dimensions simultaneously and make use of multi-level structural modeling methods. In this paper, the technique was explicated and then used to evaluate student success in collegiate courses in mathematics and history.

Academic performance measures were obtained from a sample of 868 pre-engineering students who enrolled in 1991. The measures were collected at three separate time points in two domains: mathematics and history. Growth in each domain was measured as a function of change in course grades over three consecutive terms.

Several structural models were constructed to reflect student performance in each domain. These level-one models were evaluated. The best fitting models were used to construct the level-two, cross-domain growth models. The cross-domain growth models compared student growth in the scientific realm (mathematics) with that in the liberal arts (history) arena. Next, a suitable model was identified using multiple goodness-of-fit measures. This model was used to evaluate student success in obtaining admission to the College of Engineering. Thus, the cross-domain model was expanded to include distal outcomes. The final, two-level, cross-domain model demonstrated that student growth in both mathematics and liberal arts contributes significantly to student success.

Cross-domain modeling is a very versatile methodology. It permits investigators to evaluate change in multiple dimensions. It is not restricted to linear growth but can be applied to curvilinear trajectories. Covariance structures of occasion-by-occasion level-one measurement errors can be modeled explicitly. Furthermore, different error covariance structures can be hypothesized for separate domains. This paper provides one example of this analytic technique.

THE RELATIONSHIP BETWEEN METASTRATEGIC KNOWLEDGE AND TESTWISENESS

Michelle Harmon, Mississippi State University

Obtaining accurate assessment of performance requires removal of all identifiable sources of systematic bias that do not contribute to an individual's true score. Testwiseness, the ability to respond to questions without content knowledge, is an extraneous source of variance known to contaminate test scores. This study examined the relationship between metastrategic knowledge of test behavior strategies and testwiseness. The metastrategic instruments used were the Report Strategy Instrument (RSI) and the Best Strategy Instrument (BSI). The measure of testwiseness used was the Gibb Experimental Test of Testwiseness. Influences of intelligence were removed using the Shipley Institute of Living Scale.

Participants were 220 volunteers primarily at the undergraduate level. Multiple linear regression analyses were performed using subscores of six selected testwiseness skills from each metastrategic instrument.

The analysis revealed that metastrategic knowledge explained a statistically significant proportion of the variance in testwiseness scores in terms of reported perceptions of test-taking strategies (6%), and in terms of understanding and use of test-taking strategies (13%). Implications were that metastrategic knowledge of test-taking skill is an integral part of a testwise test-taker and must be addressed.

9:00 a.m.-9:50 a.m. **TESTS (Discussion Session)..Players**

PRESIDER: Jim R. Flaitz, University of Southwestern Louisiana

A TEST RELIABILITY ANALYSIS OF AN ABBREVIATED VERSION OF THE PUPIL CONTROL IDEOLOGY FORM

Patrick V. Gaffney, St. Thomas University

This study's purpose was to conduct a reliability analysis of an abbreviated version of the Pupil Control Ideology Form, using Cronbach's alpha technique and standard error of measurement (SEM), with samples of preservice teachers (N=168) and inservice teachers (N=86) in south Florida. Descriptive and inferential statistics were also utilized in analyzing the data. The PCI Form, one of the major instruments used in the study of school climate, has played an important role in the study of human behavior in schools, and enjoys a rich theoretical and empirical tradition.

A comprehensive review of the literature revealed no previous research that reported further on the reliability or SEM of the abbreviated version beyond the two original studies conducted in 1985. Therefore, it was felt that this investigation represented a worthwhile contribution to enhanced understanding concerning the measurement of the theoretical construct of pupil control orientation.

Previous research with the abbreviated version revealed coefficient alphas of .94 and .71. In this study, coefficient alphas of .61 and .74 were calculated for preservice teachers, and .70 and .70 for inservice teachers. Regarding SEM, 3.02 and 2.84 were computed for preservice teachers, and 3.15 and 3.33 for inservice teachers. Depending on the source, it was concluded that the coefficient alphas found in this study represented satisfactory levels of reliability but that the abbreviated version was not so reliable as the original version. Therefore, it was suggested that whenever possible the original version should be used when conducting research and that the abbreviated version should only be considered for research situations when the same subjects must respond concurrently to other data-collection instruments.

WHO SAYS THAT WAS EASY? PERCEPTIONS OF ITEM DIFFICULTY AND HOW THEY RELATE TO ITEM CHARACTERISTICS AND EXAMINEE PROFICIENCY FOR UNDERGRADUATES

David T. Morse and Linda W. Morse,
Mississippi State University

The present study assessed whether selected item characteristics--difficulty level for the group, type and content of items, and difficulty level for the examinee--are related to the judgment of item difficulty.

Participants came from two undergraduate classes in educational psychology. In one class ($n = 76$), students identified what they believed were the five easiest and five most difficult items on a 50-item, multiple-choice classroom test. In the other class ($n = 43$), students did the same for a 40-item, multiple-choice classroom test. For each item, the number of students picking it as easy or difficult was recorded, and each person's performance was computed for the items chosen as easy and for those chosen as difficult.

Results indicated: (1) for both classes, statistically significant correlations ($p < .05$) of item difficulty were observed with frequency of being chosen as an easy item (= .40 and .44 for classes 1 and 2, respectively), but stronger relationships were noted between item difficulty and frequency of selection as a hard item ($s = -.79$ and $-.62$); (2) the mean difference in group difficulty level separating a person's choices of hard and easy items was statistically significant ($p < .05$) for both classes, with mean p-value differences of .17 and .22, respectively; (3) the differences in performance across self-selected easy and hard items were large, .76 and .33 for the classes; and (4) easy items were more often simple, factual information, whereas hard items more frequently called for some processing of information.

These findings suggested: (1) self-efficacy as a test-taker indeed extends to perceptions of item difficulty, which may account for why studies of self-adapted tests report inflated estimated proficiency levels, and (2) the cognitive demands of items influence empirical performance and perceived difficulty of tasks in a testing situation.

ARE RISK-TAKING, VERBAL REASONING, AND TEST-WISENESS RELATED TO ANSWER CHANGING BELIEFS AMONG COLLEGE STUDENTS?

Linda W. Morse and David T. Morse, Mississippi State University

This study investigated: (1) whether there is a relationship between risk-taking level, test-wiseness, and verbal reasoning with the perceived threshold reported for changing answers in selected test-taking situations, and (2) whether the stakes of the testing situation would influence willingness to change answers. Participants were 49 volunteers from upper-level educational psychology courses (38 women, 11 men; 19 African American, 30 Caucasian) having a mean age of 24.0 years ($SD = 6.8$). Measures included: (1) the Zuckerman Sensation-Seeking Scale, used to indicate risk-taking level, (2) a questionnaire of estimates of one's confidence for changing an initial answer choice for seven different test situations, and (3) two measures of test-wiseness, and (4) a verbal reasoning measure.

Results indicated: (1) risk-taking scores were statistically significantly correlated ($p = .016$) with the reported threshold for changing answers in only one of the seven test-taking scenarios, though with one additional case, the negative correlation with frequency of wrong to wrong changes would have been significant--the one scenario being that of taking one of four classroom tests on which there is no penalty for guessing; (2) only one statistically significant correlation was observed for test-wiseness with answer-changing thresholds ($p = .006$), this for the written driver's license examination scenario; (3) verbal reasoning scores were not statistically significantly correlated ($p > .05$) with any of the reported answer-changing thresholds; and (4) reported thresholds needed to change answers differed significantly across testing situations ($p < .001$). The significant correlations of risk-taking and test-wiseness with thresholds for answer changing were in the predicted directions.

These results suggested that risk-taking level and test-wiseness had relatively little to do with the reported thresholds necessary to change answers on tests, whereas verbal reasoning appeared not to be related to the reported answer-changing thresholds, and that answer changing likelihood appeared to be influenced by the specific test situation.

9:00 a.m.-9:50 a.m. **AT-RISK STUDENTS - GANGS**
(Discussion Session)..Missouri

PRESIDER: Qaisar Sultana, Eastern Kentucky University

ACADEMIC AND DEMOGRAPHIC VARIABLES AS PREDICTORS OF GANG ACTIVITY IN SCHOOL

Linda H. Thornton, Harding University

The purpose of this study was to develop a model using variables from information available to elementary school administrators to predict participation in disruptive youth gang activity at school in later years. A two-group predictive discriminant analysis was used to develop a model to predict youth gang activity among students in an urban school district in south central United States. The predictors were selected from age, race, gender, grade repeats, reading comprehension achievement test scores, and changes in school and school district (uprootedness). Data were obtained from elementary school records of 285 ninth-grade students (151 male and 134 female) in two junior high schools. Ethnic minorities comprised 75.4 % of the sample. Gang involvement data were provided by the school district security department.

Data were analyzed using SPSS-X and a FORTRAN computer program by Morris and Meshbane (1995). All possible subsets of predictor variables were examined using leave-one-out cross-validation accuracy estimates. Although no models classified both gang and nongang students with greater accuracy than proportional chance expectations, a model consisting of gender, grade repeats, and school and school district changes (uprootedness) yielded significant classification accuracy for gang students ($z = 12.07$, $p < .05$).

A SYNTHESIS OF RESEARCH ON HOME, SCHOOL, AND COMMUNITY COLLABORATIONS TO KEEP CHILDREN FROM JOINING GANGS

Lelia C. Mullis, State University of West Georgia

The purpose of this review of literature was to examine models for collaboration among families, schools, law enforcement, and social agencies to promote gang awareness and prevention of gang involvement at the elementary and middle school levels. Specific attention was given to programs evolving in communities with emerging gang problems, rather than gang-controlled areas. Literature and research from the fields of education, criminal justice, and social services were examined and discussed.

Research was examined in three categories: gang awareness strategies, prevention strategies, and intervention strategies. Specific policies and curricula to promote gang awareness for educators and community members were first examined. Policies and curricula for schools to prevent gang involvement among children were then explored. Finally, policies and curricula for intervention were researched.

Whenever program evaluations of established programs were available, those results were reported. Recommendations for effective community programs were made based on the available research and evaluations. Ideal elements of effective programs and barriers to effectiveness were discussed as a guide to schools and communities that were involved in collaborations to keep children from joining gangs.

9:00 a.m.-9:50 a.m. **SCHOOL ENVIRONMENT (Discussion Session)..........Parlor 104/106**

PRESIDER: Patrick Kariuki, Milligan College

ONE-ROOM SCHOOLHOUSE: A LOOK AT NON-GRADED CLASSROOMS FROM THE INSIDE OUT

Patricia M. Britt, DeSoto County (MS) Schools

The purpose of this study was to examine nongraded elementary classrooms from the perspective of the principals, teachers, and parents involved. By looking closely at these classrooms and better understanding the views of those involved inside these classrooms, future nongraded programs may be improved.

The research question for this study was: How does the nongraded classroom meet the needs of our diverse population better than a more traditional classroom? In an effort to answer this question, qualitative data were collected from classroom observations and interviews with principals, parents and teachers. Subjects for this study were a group of purposefully selected principals, parents, and teachers in selected elementary schools with nongraded classrooms already in place.

The data that emerged were classified into five areas by school: (1) physical environment, (2) experience with nongraded classes, (3) beginning set up, (4) attitudes and concerns of parents, and (5) placement and evaluation for progress. From observations and interviews with principals, teachers, parents, and the physical environment itself, it was concluded that each school will set up and operate nongraded classes in very different ways. These classrooms will operate according to the philosophy of the teachers in charge of the classes under the guidance of the principal in each school. It was also concluded after talking with these teachers and principals that each class will be different from the next, not unlike a traditional classroom. Multi-age classes that will experience the greatest success will be those in which the teachers do not feel threatened and are given the freedom to operate as they deem appropriate for their students. Keeping parents informed and working together with the school, teacher, and student must be one of the guiding principles to ensure a successful program.

ACTION RESEARCH; HOW CHILDREN IN THE FIFTH GRADE SPEND THEIR TIME OUTSIDE OF SCHOOL

Lauren Wells and Jack Blendinger, Mississippi State University

Few studies have provided information on how children spend their time outside of school. This study, involving a classroom teacher and a university professor who collaborated as action researchers, investigated how fifth-grade students in a rural school noted for below average academic achievement spent their time when not in school. Attention was also given to comparing how fifth-grade students reading below the national average, as measured by norm-referenced tests, compared to students reading above the national average. Although we have learned much about how children spend time in school, little is known about children's out-of-school activities and the influence they may have on academic achievement.

Over 100 fifth-grade students participated in the study. The instrument used was specifically designed for gathering information about how children spent their time outside of school from Monday through Sunday. It listed 10 mutually exclusive activities (e.g., watching television, reading, doing homework) and an "other" category that provided an opportunity for the children to name activities in addition to those listed. An icon (picture symbolizing the word) accompanied the words for each activity.

To analyze the data collected, the total number of times the children reported doing a particular activity (e.g., watching television) during the week and on the weekend was tabulated. A proportional value was given to each activity by dividing the tabulated total for a particular activity by the total number computed for all activities (including the other category). This process provided an activity index rating that made it possible to make comparisons among activities, from those activities in which the children engaged in the most to those they engaged in the least. Watching television was the most prevalent activity, significantly surpassing reading for both the above and below average readers. Students scoring above the national average in reading, however, watched less television than students scoring below average.

THE IMPACT OF A YEAR-ROUND EDUCATION PROGRAM ON PARENT, STUDENT, AND FACULTY SATISFACTION

Russell F. West and Jiexiu Li, East Tennessee State University

The purpose of this study was to determine if there were changes in the satisfaction levels of parents, students, and faculty at a K-12 public school in Tennessee that implemented a year-round education program during the 1996-97 school year. During April 1996, pre-assessment data were solicited from all parents, all students in grades 6-12, and all faculty in the school. These data were collected prior to the implementation of the year-round education program. The new program was implemented in July 1997. During April 1997, the post-assessment data were collected using the same procedures that were followed the year before.

Respondents in the study completed the Parent, Student and Teacher Satisfaction Inventories developed by the National Association of Secondary School Principals (NASSP). During each year of the study, over 90% of the students, 80% of the faculty, and 30% of the parents responded. Pre-to-post differences were assessed on each of the subscales on the satisfaction inventories using the t-test for independent samples (since paired observations were not available).

Results indicated that in all three respondent groups significant differences existed in the pre-to-post satisfaction scores, with scores generally reflecting a higher level of satisfaction with the year-round education program. Student differences varied, however, by grade level. The findings gave empirical evidence that, at least in this somewhat unique, K-12 public school, the change from a traditional calendar to a year-round education program had a positive impact on parent, student, and teacher satisfaction with the school. The findings gave implications for others who might be considering a year-round education program.

10:00 a.m.-10:50 a.m. **MATHEMATICS EDUCATION**
(Outstanding Paper Session)..Arkansas

PRESIDER: Linda Barron, Vanderbilt University

THE EFFECTS OF TIMING ON MATHEMATICS PERFORMANCE IN ELEMENTARY STUDENTS

Katrina N. Rhymer, Christopher H. Skinner,
Carlen Henington, SanPier Sims, and E. Joan
Looby, Mississippi State University

This study examined the effects of explicit timing on the number of mathematics problems completed in two experiments. Based on cognitive style differences, some researchers have suggested that minorities may manifest different conceptual beliefs about time. Thus, it has been assumed that timing procedures may have differential influence for ethnic minorities.

In Experiment 1, a multiple baseline design was used to determine if explicit timing would increase problem completion in African American students. Forty-four African American third-grade students participated in this experiment. Students' classrooms were randomly assigned to one of three groups: (1) Group 1 participated in three baseline and six treatment sessions; (2) Group 2 participated in four baseline and five treatment sessions; and (3) Group 3 participated in five baseline and four treatment sessions. During baseline, students completed mathematics problems without reference to time constraints. During treatment, students were explicitly timed for four one-minute intervals with a stop watch. Students completed more mathematics problems during treatment than during baseline. Accuracy remained the same for all groups.

While Experiment 1 showed that explicit timing increased problem completion for African American students, Experiment 2 was conducted to determine if the increase in problems completed was comparable for African American and Caucasian students. Sixty-eight African American and 18 Caucasian second-grade students participated in Experiment 2 (one day baseline, one day treatment). The procedures for baseline and treatment sessions remained the same as in Experiment 1. Both African American and Caucasian students averaged more problems completed during treatment than during baseline. Accuracy remained constant for both conditions.

Experiment 1 showed that explicit timing effectively increased problem completion in African American students without impacting accuracy. Experiment 2 showed that explicit timing procedures were equally effective for increasing problems completed in African American and Caucasian students without impacting accuracy.

MODELING ASYMMETRIC HYPOTHESES WITH LOG-LINEAR TECHNIQUES

Gerald Halpin, Frank Lawrence, and Glennelle Halpin, Auburn University

Log-linear models represent an overlooked method for the examination of associations among different observed characteristics. The purpose of this paper was to expound on one type of log-linear model, the asymmetric model, and to explain by example its use. Included are a discussion of measures of fit and interpretation of results. To illustrate the technique, log-linear models were applied to a data set collected from the pre-engineering program at a major southeastern university.

Asymmetric models are designed to address antecedent relations. Thus, the asymmetric model posits a causal relationship. Using an asymmetric model, the researcher can determine if subjects differ in their response rates over distinct levels of an explanatory variable. In fact, in designs that make use of multiple explanatory variables and one response variable, researchers can analyze main effects and interactions.

In this example, the log-linear modeling technique was used to evaluate associations among ethnicity, gender, and admission status. Relevant data were obtained from a sample of 868 pre-engineering students matriculating in 1991. After six quarters, they had been admitted or not admitted to an engineering program of study. A log-linear analysis was conducted to determine if College of Engineering admission status was influenced by levels of ethnicity, gender, or a combination of these two variables. Admission status was categorized as admitted, not admitted with GPA > 2.2, or not admitted with GPA < 2.2. Gender categories were male or female. Ethnic background was classified as Caucasian or other ethnic groups.

The asymmetric inquiry revealed a significant interaction between ethnic background and admission status ($p < .05$). At this point, the researcher would examine the cell frequencies to determine the exact nature of the interaction. No other statistically significant differences in admission status were detected using the asymmetric log-linear model.

HIERARCHICAL LINEAR MODEL OF STUDENT GROWTH IN MATHEMATICS

Frank Lawrence, Gerald Halpin, and Glennelle Halpin, Auburn University

The purpose of the study was to determine the effect of social context on change in mathematical ability of 1991 pre-engineering students. Measures of performance were obtained for 658 entering students. These measures were accomplished at three separate time points corresponding to the completion of three mathematics courses. Social context was defined to include ethnicity, gender, and high school preparation. Ethnicity was conceived as dichotomous. The dichotomous grouping was Caucasian and People of Color. Similarly, high school preparation was a dichotomous variable. It was defined as the presence or absence of calculus on the high school transcript.

Hierarchical linear modeling was used to test the hypotheses that gender, ethnicity, and high school preparation affect a student's initial mathematics ability as well as her or his performance during the pre-engineering series of courses. A level-one model was constructed representing individual growth in mathematics. The level-two model evaluated the effects of gender, ethnicity, and high school preparation on student initial ability and subsequent performance.

Social context seemed to have a significant effect on student initial ability but no discernible impact on performance once the student was established in the program. Reliability of slope and intercept estimates suggested that the conclusions put forth regarding the influence of social context on the student initial ability were stable. The information concerning the slope was less dependable.

10:00 a.m.-10:50 a.m. **READING AND LITERACY**
(Outstanding Thesis/Dissertation Session)...................... Ridgelake

PRESIDER: Linda T. Coats, Mississippi State University

EFFECTS OF AN INTEGRATED FORMAT FOR READING INSTRUCTION ON THE COMPREHENSION AND WORD-RECOGNITION PERFORMANCE OF FOURTH- AND FIFTH-GRADE STUDENTS WHO EXHIBIT SEVERE READING PROBLEMS

Lavada J. Parmer, Dana G. Thames, and Richard Kazelskis,
University of Southern Mississippi

This study examined the effect of an integrated language arts format for reading instruction on the comprehension and word-recognition performance of fourth- and fifth-grade students who were identified as having severe reading problems based on their Total Normal Curve Equivalent Scores on the Iowa Test of Basic Skills. The subjects, who attended a public school in a small southeastern town, were randomly assigned to either an experimental or a control group. The experimental group received one-on-one instruction, twice weekly for 50-minute sessions using an integrated language arts format that was presented by preservice teachers during their last semester of teacher education course work. The control group received traditional reading instruction (i.e., a format typical of the directed-reading approach found in the basal reader) that was presented by their regular classroom teachers.

Data were collected prior to and following a 10-week period of instruction and were analyzed using analysis of covariance procedures. The preservice teachers administered the Slosson Oral Reading Test and the Analytical Reading Inventory as pre- and posttests to the students in both the experimental and control groups. Analysis of the data revealed that an

integrated language arts format for reading instruction was effective in increasing comprehension of both narrative and expository text. Word-recognition performance was found to be higher than comprehension performance before treatment; however, it was not significantly affected by the experimental treatment. A relation between the Dyslexia Screening Instrument (DSI) and word-recognition performance was found; however, no significant relation was found between the DSI and reading comprehension performance. Results implied that traditional reading instruction placed more emphasis on word recognition than comprehension, and that an integrated language arts format enabled readers to strengthen their comprehension ability.

THE USE OF COOPERATIVE EDITING IN REMEDIAL FRESHMAN COMPOSITION: AN ANALYSIS OF ITS EFFECTIVENESS IN IMPROVING STUDENTS' WRITTEN GRAMMAR

Sue S. Minchew, Mississippi State University

The purpose this study was to determine whether cooperative editing would significantly decrease the mean number of major grammatical errors on papers written by remedial freshman composition students. Four intact remedial freshman composition classes (79 students) taught by the senior author were randomly labeled experimental or contrast. The two contrast classes were taught by the textbook/lecture/response group method. Teaching strategies for the experimental classes differed only in the use of researcher-developed cooperative editing exercises. For these exercises, students were randomly assigned to groups to analyze and correct student papers containing major grammatical errors. A randomized pretest-posttest contrast group design was used for this study. A pretest paper graded blind by the senior author served as a covariate to posttest papers graded by the same process. Using the mean number of major grammatical errors per class as the outcomes measure, repeated measures analysis of data indicated a significant decrease ($p <. 05$) in major errors committed on the posttest paper when compared with the pretest paper; likewise, an ANCOVA revealed significantly fewer major grammatical errors on posttest papers written by the experimental students. Results verified the efficacy of teaching grammar as well as the superior effectiveness of cooperative editing compared to traditional grammar teaching in reducing major grammatical errors on remedial freshman composition papers.

ADMINISTRATORS' PERCEPTIONS OF THE EFFECTIVENESS OF READING RECOVERY AS AN EARLY LITERACY INTERVENTION PROGRAM FOR AT-RISK FIRST GRADERS

LaVerne M. Allen, Jackson State University

The purpose of this study was to determine the perceptions of elementary school administrators toward the effectiveness of Reading Recovery as an early literacy intervention for at-risk first graders. The study investigated administrator's perceptions in relation to effectiveness, the value and support given by others, and implementation factors. Demographic variables related to the administrators and the administrators' school sites were also investigated and analyzed.

To accomplish the purpose of this study, research questions and hypotheses were posed. The major null hypothesis was that there would be no significant difference in the perceptions of administrators regarding Reading Recovery's effectiveness when variables related to the administrators and their schools were considered. A survey was conducted of 400 administrators selected from 41 states (excluding Alaska, Colorado, Delaware, Utah, Nevada, New Mexico, Wyoming, North Dakota, and Kansas) using a forty item questionnaire. The statistical analysis consisted of descriptive statistics of the frequencies of the responses, the chi-square test of independence, the independent t-test and the one-way analysis of variance (ANOVA) to determine the relationship in the comparative analyses.

10:00 a.m.-10:50 a.m. STATE REPORT CARDS (Discussion Session)....................Players

PRESIDER: T. Lee Napier, Jackson State University

THE ALABAMA STATE SUPERINTENDENT'S REPORT CARD: AN ANALYSIS OF LOCAL EDUCATION AGENCY CHARACTERISTICS AND SUCCESS AT MEETING STATE DEFINED PERFORMANCE MEASURES

Jerry G. Mathews and E. Raymond Hackett, Auburn University

State defined performance indicators for education are rapidly becoming the hallmark of the nineties. A number of states now have some form of performance indicator legislation enacted and with each legislative session the number increases. Most of the analysis and literature on the development of state-level performance indicators describes a pattern of implementation with little prior conceptual development and a focus on interinstitutional or school district comparison. This paper studied the performance indicators established at the state level for local education agencies in one state, and reviewed the appropriateness of the measures for systemic decision making and public reporting. This paper served as a challenge to the research community to take an active role in the study of measures defined as instruments of public education policy.

The Alabama State Superintendent's Report Card provided data on 14 performance indicators that defined some measure of accountability for the 128 local education agencies (LEAs) in the Alabama system. Data from each of the LEAs for each of the indicators for the school year 1995-96 were collected from this report. Information on LEA characteristics was collected from the Annual Report of Statistical and Financial Data issued by the Alabama State Board of Education.

School district performance on the Report Card measures was examined in the context of individual LEA financial and demographic characteristics using descriptive and multivariate statistics. The results indicated that state-established performance indicators can be analyzed as to their appropriateness for systemic decision making and public reporting.

SUPERINTENDENTS' PERCEPTIONS REGARDING SELECTED EDUCATIONAL PRACTICES

William F. Ferguson and Charles W. Davidson,
University of Southern Mississippi

The purpose of this study was to examine perceptions of public school superintendents regarding charter schools, inclusion, year-round schools, site-based management, alternative licensure, and home schooling. In education, as in politics, perception is far more important than reality in decision making. However, the perceptions of educators who are entrusted to carry out mandated directives (legal or legislated) or to develop innovative practices should never be disregarded.

From the literature, six current practices were identified that hold strong implications for future educational practice. An instrument requiring four-point Likert-type responses was developed. Surveys were mailed to superintendents randomly selected from Patterson's *American Education* directory, with every state represented. Of 247 delivered surveys, 154 were returned after the first mailing.

District population, student enrollment, and region of the country (a categorical variable) were used to predict superintendent responses to each survey item. Multiple regression correlations ranged from .0935 for approval of alternate licensure to .8363 for year-round schools. Only the statement regarding the desirability of moving toward year-round schools failed to result in at least one significant bivariate correlation between one of the three independent variables and the dependent variable of superintendent approval. In general, New England most frequently approved of the practices, and student enrollment of the district also was a significant predictor.

Obviously, there was considerable variance among superintendents' perceptions regarding what were considered to be good educational practices. It appeared that the success of educational policies and practices may have been more a function of their acceptance by superintendents than it was of the effectiveness and efficacy of the innovations. Thus, it is imperative that educational decision makers at state and national levels monitor the perceptions of superintendents regarding proposed changes in educational policies and procedures in order to assure that proposals are supported by the very persons who must implement them.

SPATIAL ANALYSIS OF PATTERNS OF KENTUCKY ASSESSMENT RESULTS, AND SOCIAL AND ECONOMIC INDICATORS

Edward Reeves and Deborah Grubb,
Morehead State University

The purpose of the study was to conduct spatial analyses of Kentucky's statewide accountability assessment data and measures of social and economic level. An interdisciplinary team of an educator, a sociologist, and two geographers developed and analyzed Choropleth maps for individual school and district level assessment results for school years 1991 through 1997 using the Kentucky Instructional results Information System. Spatial analyses revealed pockets of excellence within areas of mediocre assessment performance and pockets of mediocre performance within areas of assessment excellence when looking at district level data. It also revealed pockets of excellence at the individual school level within districts with mediocre assessment results and pockets of mediocre assessment results within excelling districts. Choropleth analysis also revealed spatial relationships between academic assessment results and various economic and social indicators. A model was developed demonstrating the value of using Choropleth maps in the analysis of statewide educational assessment data.

10:00 a.m.-10:50 a.m. EVALUATION (Discussion Session)............................... Missouri

PRESIDER: Robert Fontenot, University of Southwestern Louisiana

CONTROVERSIES SURROUNDING THE LIKERT-TYPE SCALES: WHY CAN'T WE RESOLVE THEM?

Gunapela Edirisooriya and Maggie Wyatt,
East Tennessee State University

Controversies surrounding the Likert-type scales persist. The major issues are: (1) Are the units of measurement ordinal or equal-interval? (2) what does the midpoint of the scale represent? and (3) what is the appropriate length of the scale? This paper critically examined the literature and proposed a rational basis to examine further the unresolved issues.

The sources for this study included: (1) 73 references collected through a selective ERIC search, (2) two series of discussions on the area-D Discussion List in October 1995 and April 1997, respectively, and (3) one series of discussion on the EDSTAT Discussion list in September 1996.

The findings included the following: (1) the ordinal or equal-interval issue has not been resolved, and the use of the data analytical method such as CDF or Dual-scaling is a convenient solution, and it does not resolve the issue; (2) the literature on the midpoint is rather inconclusive because the debate is heavily centered on "political grounds" rather than epistemological grounds; and (3) among disciplines, research evidence differs on the appropriate number of points on a scale. In educational research, evidence has been in favor of a five-point scale including a midpoint. Evidence from the debates on the Discussion Lists mentioned earlier suggests that researchers, especially graduate students, seem to hold misguided views on these issues surrounding the Likert-type scales.

These findings persuaded us to suggest a theoretical framework, based on information processing theory, to construct attitude scales. This method successfully addressed issues surrounding the Likert-type scales.

ASSESSING INTERNAL CONSISTENCY OF A FIVE-RESPONSE OPTION VERSUS A SEVEN-RESPONSE OPTION INSTRUMENT USING THE MOTIVATED STRATEGIES FOR LEARNING QUESTIONNAIRE

Jeremy Fisher and Mark Davenport, Auburn University

The purpose of this study was to evaluate the psychometric properties of the Motivated Strategies for Learning Questionnaire (MSLQ) when reformatted from the original seven-point Lickert response format to a five-point Lickert response format. The MSLQ is a self-reported instrument that measures motivation and learning strategies. Eight hundred nine undergraduate students enrolled in a freshman-level core psychology course were given the MSLQ in one of two forms. The subject group given the new, five-response format instrument (n = 587) was compared to the group that was given the original, seven-response format instrument (n = 297). Reliabilities for each of the 15 subscales for both groups were generally consistent. Between groups, only five of the 15 subscales differed in reliability by greater than .05. None differed by greater than .10. Finally, the data from the five-response group were fit to a confirmatory factor model created using the seven-response group.

THE EFFECTS OF STUDENT EXPECTATIONS ABOUT THE COGNITIVE COMPLEXITY OF TEST ITEMS ON STUDY STRATEGIES AND ON MEMORIZATION AND COGNITIVELY COMPLEX TEST ITEM PERFORMANCE

Margaret E. Ross, Auburn University

Two studies were completed to address the hypothesis that student expectations about the cognitive complexity of examination items influence study strategies and test performance. The literature has provided evidence that student expectations about item format (e.g., essay versus multiple choice) influence both study strategies and performance, but has not directly addressed questions related to the level of cognitive complexity required by test items.

Experimental Study: Following instruction on test item writing, students in measurement courses were randomly assigned to either a complex condition (n = 61) or a memory condition (n = 62). Students were told to expect either complex items or items requiring memorization, depending on group membership. A test over the instruction and a study strategies questionnaire were administered to all students. Analysis of variance procedures supported the hypothesis that students expecting complex items used a deeper approach to studying and perform better on complex items than students expecting memorization items. It was concluded that, under appropriate conditions (e.g., consistency between instructional approaches and testing practices in degree of emphasis on complex thinking skills), expectations about test item complexity can affect student study strategies and performance.

Field Study: Sixty student volunteers from 32 social science courses were interviewed regarding expectations about item complexity on an upcoming examination to assess the effects of these expectations on study strategies. Students completed two questionnaires addressing how they generally studied and how they planned to study for the next examination in the course from which they volunteered. The near-zero correlation between student expectations and general study strategies and the positive correlation between student expectations and specific study strategies differed in the expected direction. However, the nonsignificant difference in these correlations suggested the possibility that additional variables and/or interactions should be considered in a model describing relationships among expectations, study strategies, and performance.

10:00 a.m.-10:50 a.m. **RESEARCH METHODOLOGY**
(Discussion Session)..Parlor 104/106

PRESIDER: Marion Dana-Wesley, University of Southern Mississippi

RESEARCH ON MAIN SURVEYS: RESPONSE RATES AND METHODS IN RELATION TO POPULATION GROUP AND TIME

Judith A. Boser, The University of Tennessee,
and Kathy Green, University of Denver

Reviews of research studies on mail survey response rates have usually focused on identifying the survey methods most likely to produce high response rates. In order to obtain a body of studies that is large enough to examine different potential response facilitators, it has been necessary to utilize studies conducted over a period of years. While textbook authors (and doctoral committees) indicate expectations of acceptable response rates, there has been no research to establish the response rates generally obtained in mail surveys and that are deemed acceptable for publication. The purpose of this review was to look for trends across time in response rates and variables studied for published mail surveys, and to compare response rates and variables studied for different target populations.

A database of 221 published aticles documenting empirical studies of the effect of various mail survey methods has been established and provided the data for this investigation. The publication dates of the studies begin with 1931 and continue to the present. Predominant population categories include the general public, customers, educators, students and alumni, professionals other than educators, business people (managers, executives), employees and farmers, and other. Response rates cover a wide range, from less than 10% to over 90%. The basic findings included trends (or lack of them) across time in response rates and variables studied, and related response rates and variables to population groups.

CRITICISM AND SYNTHESIS IN THE GRADUATE STUDY OF EDUCATION

Jim C. Fortune, Virginia Polytechnic Institute and State University;
Mary Ruth Reynolds, State University of West Georgia;
and Abbot Packard, Consultant

The purpose of the study was to investigate and describe literature reviews from a convenience sample of 268 dissertations completed in the College of Education since 1990 at Virginia Tech. Twenty questions were used in the analysis, which was structured around three components: (1) nature of the review, (2) synthesis of research, and (3) qualifying comments.

Results have been reported as percentages that will serve as guides for discussing criteria for evaluating student theses and dissertations. The presentation offered an opportunity for audience participation in selecting pertinent evaluative criteria and for describing additional methodology used in the scholarly critique of student reviews of the literature.

10:00 a.m.-10:50 a.m. INSTRUCTIONAL PRACTICES (Display Session)..........Board Room

CLASSROOM APPLICATIONS OF FOCUS GROUP METHODOLOGY

Mary Ruth Reynolds, State University of West Georgia; Jim C. Fortune,
Virginia Polytechnic Institute and State University;
and Abbot Packard, Consultant

Our recent research has documented multiple applications of focus group methodology in educational settings. Focus groups have been especially effective for exploring sensitive topics and for resolving conflicts.

The purpose of this presentation was two-fold: (1) to demonstrate an instructional application of focus group methodology and (2) to utilize this approach for continued validation of a collaborative model for literacy learning.

Conference attendees were invited to participate in analyzing videotaped segments of children's play and focus groups. Through group collaboration, the audience joined conversations regarding the utility of focus groups for cooperative learning among college students.

CHEM WORLD-PEDAGOGY: THE DEVELOPMENT OF CD-ROM TEACHING TOOLS FOR ELEMENTARY SCIENCE METHODS

Dawn A. Hofwolt and Clifford A. Hofwolt,
Vanderbilt University

ChemWorld - Pedagogy intended for use in elementary science methods courses is a companion to ChemWorld which is used in Introductory Chemistry classes. The materials consists of three CD's and accompanying programs, ChemWorld for chemistry students and ChemWorld-Pedagogy for elementary science methods students.

The ChemWorld-Pedagogy version consists of teaching episodes in elementary schools that involve some aspect of chemistry. Students were asked to analyze these episodes for the quality of teaching, styles of teaching, and types of instructional strategies employed. ChemWorld-Pedagogy also contains various discrepant events that allow methods students to interact with related content. Real world applications were presented to help bridge the gap between classroom and the practical side of chemistry in which new materials were developed from research.

ChemWorld-Pedagogy is intended for students to use independent of class time. A number of case studies about science teaching were presented that extended the students' view of science teaching and allowed them to analyze teaching from multiple perspectives.

11:00 a.m.-11:50 a.m. **EDUCATIONAL REFORM**
(Training Session - 1 hour)..Louisiana

THE PROCESS OF REFORM EVALUATION: REGULAR EVALUATION FEEDBACK ON ORGANIZATION, RESOURCES, AND MANAGEMENT (REFORM)

Judith A. Burry-Stock, The University of Alabama

Programs designed to change educational practices are more effective if evaluation procedures include implementation methods designed for quick feedback. While summative evaluations are very effective for long-term practices, formative techniques that provide quick feedback are more likely to assist in changing educational outcomes. Procedures used to bring about overall changes for the benefit of enhancing educational practices are designed to provide feedback immediately. These data can also be used in a summative sense.

REFORM (Regular Evaluation Feedback on Organization, Resources, and Management) evaluation procedures have a built in mechanism that will produce written information on the organization, resources and/or the management of the projects. These procedures may take the form of performance rubrics to be completed at the end of a focus interview, telephone interview, or an individual interview with program stake holders. Even though transcripts provide considerably more in-depth information, the process of transcribing the interviews and interpreting the data is very time consuming. Information that would enable the project to become more efficient and effective in meeting its goals is delayed in getting to the people who could alter the project and thus bring about the necessary changes in a manner that would assist in educational reform.

In providing internal/external program information for formative/summative outcomes the researcher has discovered that the program is more effective in meeting its goals if these REFORM activities are implemented. Statistical analyses from The University of Iowa's NSF funded multi-million dollar Scope Sequence and Coordination Project indicate that the use of REFORM formative activities do make a difference in moving reform into various parts of the educational system.

11:00 a.m.-11:50 a.m. **GENDER AND OTHER ISSUES**
(Outstanding Paper Session).......................................Arkansas

PRESIDER: Kathy Kramer Franklin, University of Arkansas at Little Rock

FACTORS CONTRIBUTING TO GENDER INEQUITIES FOR GIRLS IN EDUCATION: AN EXAMINATION OF HOW GIRLS LEARN HELPLESSNESS

Barbara T. Berman, The University of Alabama

When children's self-esteem and development are hampered, the repercussions echo throughout our society. This paper examined gender inequities for girls in education. Despite advancements for women in higher education and in the professional sector in the past century, girls and boys have not received an equal education in elementary and secondary schools in the United States. That gender inequities for girls in education exist is indisputable.

If we examine the factors contributing to gender inequities for girls in education, they can be categorized into five groupings: (1) societal expectations, (2) evaluation and feedback measures, (3) psychological forces, (4) gender issues in peer interactions, and (5) inequality inherent in the school structure. What undergirds each of these factors is that girls learn helplessness, which hinders them as they grow and develop into adult women.

Solutions have been offered along seven different theme lines. These theme lines include curriculum, school organization, policy, more systemic change, legal aspects, staff development, and testing. Even though all solutions are critical, it is important to prioritize the solutions, and make an informed judgment about which should be addressed first. The top priority school changes that should be addressed first are in relation to five areas. These areas include preparation programs, curriculum, administrative positions, educational opportunities, and sexual harassment. If we move in this direction, girls will be enabled to unlearn helplessness and learn that strength and assertiveness are extremely positive qualities for girls to possess.

AN ANALYSIS OF THE RELATIONSHIP BETWEEN SITE TEAM RESOURCES, COUNCIL PRACTICES, AND OUTCOMES

Scott C. Bauer and Ira E. Bogotch, University of New Orleans

School-based management (SBM) is not an end in itself, but rather a process intended to lead to school improvement. In the literature on SBM, there is seldom an explicit connection made between the concept of shared decision-making and either intermediate benefits and processes or school improvement outcomes. Or, if researchers attempt such causal connections, they tend to design studies that test relationships among discrete variables rather than examining both direct and indirect effects among the input, process, and outcome variables. This study extended our knowledge of school-based management by looking integratively at the relationships among contextual variables (e.g., the district's support for SBM, allocated resources, training), site based council practices (e.g.,communication patterns, decision-making practices, and relationships), and outcomes (e.g., teaching and learning, innovations, and satisfaction).

Using survey data collected from approximately 130 site-based council members working on 13 site-based councils in a major Midwestern city, process variables were operationalized through factor analyses and regression equations before looking at the relationships among the resulting classes of variables (i.e., contextual, practice, and outcomes) through path analyses.

The findings indicated that there was a significant causal sequence in terms of achieving positive school-based management outcomes. Specifically, most of the contextual (or input) variables were only indirectly related to various outcomes, while the variables relating to communication and decision-making practices had significant direct effects on school improvement outcomes. Thus it was concluded, first, that the working relationships among the members of site-based councils were significant in achieving teaching and learning reforms, and, second, that more attention needs to be paid to practice variables in designing and implementing school-based management.

THE EDUCATIONAL AND OCCUPATIONAL ATTAINMENT PROCESS FOR AMERICAN WOMEN

Yukiko Inoue, The University of Memphis

This study estimated a variation of the Wisconsin model (an accepted process by which American men attain their social status in American society) to address these questions: Is the status attainment process for women the same as that for men? In particular, does socioeconomic background play a similar role for women in determining their status attainment when examined from the same sociological perspective as that for men? The factors influencing the attainment variables were hypothesized in a longitudinal-causal model for the national sample of high school seniors of 1972 (the year in which Title IX of the Education Amendments was enacted, opening greater educational opportunities for women) in order to examine the process by which aspirations were developed and the manner in which they influenced subsequent attainment-oriented behaviors. The results of path analysis for this study (N = 2,160) revealed that the attainment process for men and women was basically the same and that social origin was equally important for both sexes. Punctuating a very strong linkage between educational and occupational attainment, the results also provided considerable evidence that the development and the maintenance of status aspirations, in addition to academic performance and significant other's influence, during secondary education exerted a pronounced influence on an American individual's success in the adult and occupational world.

11:00 a.m.-11:50 a.m. DISCIPLINE (Discussion Session)................................Ridgelake

PRESIDER: Gahan Bailey, Louisiana Tech University

A STUDY OF PRESERVICE TEACHERS' BELIEFS ABOUT VARIOUS ISSUES AND MYTHS REGARDING THE USE OF SCHOLASTIC CORPORAL PUNISHMENT

Patrick V. Gaffney, St. Thomas University, and Sharon Byrd-Gaffney,
The School Board of Broward County (FL)

The purposes of this study were to determine prospective teachers' beliefs about issues and myths associated with scholastic physical punishment and to establish the reliability and validity of a section of an instrument that measured beliefs about such myths. A sample of 143 preservice teachers participated in this study. The data-collection instrument was the Corporal Punishment Questionnaire, which consisted of an Issues and a Myths section. Using the Cronbach's alpha technique, the Myths section had a reliability of .928. Validity was determined by a panel of judges and by computing Pearson r between the various myths and the issue of whether scholastic corporal punishment should be used. The data were further analyzed using descriptive statistics.

Subjects generally disagreed with the use of scholastic physical punishment with students and their own children and favored procedural due process and parental permission before its use. There was overall agreement with such myths as scholastic corporal punishment is needed and administered only as a last resort, is used rarely and only for serious problems, is disliked by all students, and punishes only misbehaving pupils. There was overall disagreement with such myths as scholastic physical punishment teaches respect, leads to character development, deters student aggression, prepares pupils to live within a society that punishes rule-breakers, is the only thing some students understand, is time efficient and harmless, attacks the problem head on, works better than other disciplinary procedures, is necessary for educators' protection, its effect increases with its use, without its use behavioral problems increase, educators only use it for pupils' benefit, and if they do not then they will verbally abuse students. For local teacher education programs implications were drawn and recommendations were made. Suggestions for future research were also offered.

CORPORAL PUNISHMENT IN THE SCHOOLS

Warren A. Land, Mississippi State University

The primary purpose of this study was to determine the most current information concerning the use of corporal punishment in the schools and its potential for helping to solve some current educational problems. Specifically, this study was directed toward a review of the current research literature as a means of learning more about the current status of corporal punishment and its possible use in improving the educational program of students.

The use of corporal punishment seemed to be declining, but it was still allowed and used in some school districts. It may be described as the use of physical force to cause pain, not injury, in order to correct or control a child's behavior. The primary argument for its continued use centered around it as the "last resort" effective punishment. When it was used, specific guidelines were mandated.

The research literature suggested superior alternatives to the use of corporal punishment that may be more effective. These included time out, isolation, detention, work details, reinfocement, and rewards for good behavior. Other methods included alternative programs and behavior modification techniques.

The discussion concerning the role and use of corporal punishment will continue. Most researchers appear to have reached agreement that corporal punishment does not work. The research evidence pointed toward its use in a discriminatory manner. It is often used on students who are physically punished at home. Boys are paddled as many as twenty-five times more than girls. Minority students are twice as likely to be punished, and junior high students are more likely to be paddled than any other group. Female principals use corporal punishment less often than males. While discipline will continue to be a concern associated with the classroom, educators must continue to utilize new and more effective methods.

SAFETY OR DISCIPLINE: THE REAL ISSUE IN PUBLIC SCHOOLS

Angela Maynard Sewall and Gary D. Chamberlin,
University of Arkansas at Little Rock

The study was a component of a research project designed to provide a blueprint for the community and public schools to address white flight, fiscal issues, student achievement, and enrollment in an urban public school system. Predicated on surveys conducted with white and African American citizens as well as surveys completed by classroom teachers and principals, a picture of the reality of student violence and discipline issues was completed. At issue was the public and media perception that there was considerable violence in the schools, which negatively impacted the learning environment. This perceived violence was often cited as the primary reason for white and, indeed, middle-class African American flight from the district.

A study of the data gathered via the surveys showed that teachers and principals rated discipline as a problem but did not perceive safety or violence to be an issue. However, the study concluded that unless and until the discipline problems were resolved, it was probable that public concern with and perceptions of violence could not be addressed and resolved. The discussion addressed process and findings.

11:00 a.m.-11:50 a.m. **TECHNOLOGY (Discussion Session)................................Players**

PRESIDER: Robert L. Kennedy, University of Arkansas at Little Rock

A STUDY OF 21ST CENTURY CLASSROOM TEACHERS PERCEPTIONS REGARDING THE TRAINING AND USE OF TECHNOLOGY IN K-12 PUBLIC SCHOOLS IN TENNESSEE

Mary B. Lewis, Hamilton County (TN) Public Schools

The purpose of this study was to investigate the effect of the 21st Century Classroom technology teachers' training in Tennessee. The first step in gauging the overall effect of technology on teaching effectiveness in Tennessee was accomplished by measuring the teachers' perceptions of their training activities. A four-part instrument, developed and piloted by the researcher, was used to measure teachers' perceptions regarding their training and use of the 21st Century technology bundles.

A random sample of 500 teachers, stratified by grade level and year of implementation of the technology bundle, was surveyed. Two hundred ninety-nine teachers responded, resulting in a 60% return rate. All demographic data were analyzed through frequencies and percentages. A one-way ANOVA indicated no significant differences in teachers' perceptions regarding their training. Professional development activities were analyzed using a chi-square, and two activities were found to be significantly different at the .05 level.

Kruskal-Wallis procedures were used to analyze hypotheses on the following technology research constructs: relative advantage, compatibility, complexity, observability, trialability, image, demonstrability, and voluntariness. Conclusions based on the findings of this study indicated the training topics to be useful to all teachers. The longer teachers used the technology the more it was used for professional activities. Elementary teachers have not volunteered as readily, nor have they felt as comfortable with technology as have the teachers at the middle and high school levels. All three grade level groups perceived technology as image enhancing and a relative advantage. The research suggested that more differentiated training may be necessary for teachers employed at various grade levels. Further research was deemed necessary to determine the effect of technology on teaching.

ASSESSING THE IMPACT OF APTICOM: A COMPUTER-ASSISTED VOCATIONAL EVALUATION TOOL

Vivian M. Larkin, Auburn University

While computer-assisted vocational assessment instruments appear to hold promise, critical questions regarding the utility of many of these instruments remain unanswered. Research is needed that investigates the effectiveness of computer-assisted vocational assessment instruments currently being used in rehabilitation settings. This study was designed to offer an independent evaluation of the psychometric qualities associated with the aptitude section of the APTICOM Test Battery beyond claims made by the developer. The purpose of this study was to determine if the subtests of the APTICOM are comparable to corresponding subtests on the General Aptitude Test Battery (GATB). The APTICOM is a computer-assisted vocational evaluation test battery. It was developed to offer an automated alternative to the GATB, a traditional pencil-and-paper aptitude test battery. The APTICOM is one of the most publicized computer-assisted systems on the market today. It is marketed as a cost efficient, time saving multiple aptitude assessment battery that uses the same aptitude definitions defined by the U. S. Employment Services. The GATB was developed in 1947 and has been researched in a series of continuous development programs and occupational validation studies. The GATB is generally accepted as the standard by which other instruments have been measured. The GATB served as the criterion in this study.

Data analyses were conducted for 110 high school students, who served as subjects in this study. Based on the results of this study, the APTICOM automated test battery appeared to be an acceptable method of measuring six of the nine aptitudes investigated. The findings in this study represented an independent investigation, and raised some interesting questions about the construct of the APTICOM aptitude test battery; in particular the Motor Coordination, Finger Dexterity and Manual Dexterity constructs.

COMPUTER-ASSISTED ELEMENTARY WRITING CURRICULUM: METHODS AND ASSESSMENTS

Michael S. Mott, William J. Sumrall, and M. Lee
Hodges, Mississippi State University

The purpose of the review of literature was to synthesize a wide range of both quantitative and qualitative studies of teacher implementation of computer-assisted writing curriculum methods. Studies on effects of computer-assisted learning, the relationship of computers and children's writing, and assessment methods for electronic and traditional writing environments were reviewed.

Computer platforms of word processing, interactive multimedia, and hypermedia were juxtaposed with inherent problems of assessing these newly popular and proliferating writing curriculum environments.

Potential obstacles, possible solutions, and new concerns for evaluating students' electronically published writings were addressed to illuminate available directions to the dilemma of teacher assessment of electronically created writings.

11:00 a.m.-11:50 a.m. **ACHIEVEMENT AND ASSESSMENT (Discussion Session)..Missouri**

PRESIDER: Charles W. Davidson, University of Southern Mississippi

ALTERNATIVE ASSESSMENT IN K-12 SETTINGS: PERSPECTIVES FROM THE FIELD

Randall Parker, Louisiana Tech University

This project was part of a cooperative inservice, professional development program between the university and the local school districts. The course, "Using Alternative Assessment to Improve Student Achievement," was completed by 15 experienced teachers (seven elementary, four middle school, and four high school) during the fall semester of 1996. Participants were from three school districts and years of teaching experience ranged from two to more than 15. The main purpose of the class was to provide participants an opportunity to design and implement at least one alternative assessment in their classrooms. Class activities included performance assessments, reflective journal writing, and portfolio development.

The purpose of the study was to determine teacher perceptions regarding the problems encountered in planning and implementing alternative assessments, the value of alternative assessment, and the effect of alternative assessment on student achievement. Data were gathered through unstructured interviews, observations, reflective writings, and document analysis.

Qualitative analysis of the data revealed the following themes: (1) participants felt pressure to "cover the curriculum" and expressed concern about the time needed to prepare and complete alternative assessments; however, they did express satisfaction in developing new assessment methods; (2) participants felt that they better understood their students through alternative assessment and that this was a way to allow students to take responsibility for their learning and to show competence; (3) participants used the assessments to measure student growth and to meet the individual, diagnostic needs of their students; and (4) participants expressed support for performance assessment data in grading students and in enhancing student achievement.

The results of this study indicated that, with time, opportunity, and support, teachers could increase the development and use of alternative assessments in their classrooms to enhance student learning.

A PERFORMANCE INDEX IN A PERFORMANCE-BASED ACCREDITATION SYSTEM: YEAR TWO

Michele G. Jarrell, The University of Alabama

The purpose of this study was to determine whether there was a significant gain in the performance index in its second year. A statewide performance-based accreditation system began using a performance index in 1995-96 to indicate where school districts fall in the distribution of accreditation levels. The performance index was based on the percentage of performance variables met by a district and was designed to assist district personnel in assessing improvement toward higher accreditation levels. District personnel were provided with a table indicating the total number of variables involved in the accreditation system and the performance index assigned for meeting each number. The performance index, used in conjunction with their district scores, indicated to the personnel the number of variables on which the district needed improvement and the specific areas requiring improvement.

The performance index was first assigned in Mach 1996, and the second index was assigned in Mach 1997 for 1996-97. An analysis was done to determine if the gain in the 1996-97 performance index was significant over the 1995-96 index for the approximately 150 districts in the state. The difference was found to be significant ($p < .01$).

STUDENTS HELPING STUDENTS TO ACHIEVE

Sharon Yarbrough, The University of Tennessee-Knoxville,
and Emory Register, Tennessee State
Department of Education

The purpose of the study was to explore the perspectives of peer tutors, study partners, and site coordinators participating in the Governor's Study Partner Program across the state of Tennessee. Academically capable students assist "at-risk" students by helping them in strengthening study skills, building positive attitudes toward learning, increasing their motivation to succeed, and enhancing their self-esteem.

Data were collected from a sample of 355 peer tutors and 200 study partners in selected middle and high schools during the 1996-97 school year. The School Situation Survey was used to measure four scales of school-related student stress (Teacher Interactions, Academic Stress, Peer Interactions, and Academic Self-Concept), and three scales of manifestations of stress (Emotional, Behavioral, and Physiological). In addition, data were obtained from peer tutors, study partners, and site coordinators by using self-reporting questionnaires.

Improvements in grades, self-concept, interest in school, and relationship development were found for peer tutors and study partners. Commonalities for implementing the Governor's Study Partner Program were found among site coordinators.

Begun as a dropout prevention project, the Governor's Study Partner Program theme, students helping students, has given many students something they have never had before--success in school.

11:00 a.m.-11:50 a.m. **STATISTICS (Discussion Session)............................Parlor 104/106**

PRESIDER: Theresa M. Akey, Auburn University

STRUCTURE EQUATING MODEL FOR THE CHINESE STUDENTS ATTITUDE TEST OF THE AMERICAN EXPERIENCE

Ming Lei, The University of Alabama

The purpose of the research was to study the factors and the relationships among these factors that affect the attitude of the Chinese students towards their American experience. A confirmatory factor analysis using structure equating was done on the 32-item instrument called The Chinese Students Attitude Inventory of the American Experience (CSATAE). In order to get a satisfied factor pattern, six items were deleted from the original CSATAE. The modified instrument still had a reliability of 72%.

Five factors were selected from the modified CSATAE. They were different American experience, satisfaction with school life, opportunity, adaptation, and other. Two factors were selected from the five factors as the second order factors: personal development and satisfaction with American social life. A structure equating model was created for these factors. There, the first order factors were functioned as the observed variables and the second order factors as the latent variables. The $2 = 0.77$ and RMSEA = 0.0 indicated that the model fit the data well. All of the path coefficients in the model were significant.

Conclusions could be drawn that the positive attitudes of the Chinese students toward their personal development came from the satisfaction of their school lives and the greater opportunities in their academic achievements and material satisfaction. Different American experience was the main factor that contributed most to their American social life. They indicated that the positive attitude of their American experience basically came from their confidence of personal development. The greater opportunities were the major factor of their confidence.

THE DETECTION OF MALE/FEMALE ACADEMIC DIFFERENCES USING STRUCTURAL EQUATION MODELING

Jeff Burnett and Jwa K. Kim, Middle
Tennessee State University

The purpose of this study was to investigate gender differences among college students using latent trait theory. Five variables were explored: college GPA, high school GPA, American College Test Composite score, student's age, and credit hours earned. Student data were obtained from an archival database at Middle Tennessee State University; 1,350 out of 2,062 graduating students from the Spring of 1996 were utilized for analysis.

Initially, covariance structure between males and females was tested. Results indicated male and female covariance structures to be significantly different, $X^2(15, n = 1,350) = 378.18, p < .0001$. Maximum likelihood factor analysis was conducted to determine the number of common factors, as well as the factor structure for each group. Results of the analysis showed males and females to have a different number of common factors. EQS was utilized to test any underlying latent structure differences between the two groups. Results were discussed in accordance with previous studies.

EFFECT SIZE ESTIMATION WITH NON-PARAMETRIC STATISTICS

Jim R. Flaitz, The University of Southwestern Louisiana

For a number of years, there have been those who have criticized the use of statistical significance testing, in the Fisherian tradition of testing the null hypothesis, primarily on the grounds that Type II errors are largely ignored, leading to potentially highly erroneous conclusions about the true status of the null hypothesis, and perhaps more importantly the alternative hypothesis. In addition, concerns have been expressed that researchers often mistake statistical significance for reliability and/or replicability of findings. More recently, these considerations have begun to make their appearance in the guidelines of some professional research journals, which require reporting of effect size information and, where appropriate, replicability findings (e.g., jackknife procedures, bootstrap analyses, or possibly cross-validation results). While the appropriate statistical values for reporting effect size with parametric procedures are relatively familiar and straightforward to calculate, it would appear that comparable effect size estimators for the family of non-parametric statistical procedures are less obvious.

The purpose of this paper was to search statistical textbooks and relevant research literature to discover the current status of effect size estimators with non-parametric procedures. A general discussion of the problems with statistical significance testing was offered, along with a brief treatment of the identification and reporting of effect size estimators for single and multiple studies. The most common non-parametric procedures were then identified, and the status of each procedure was discussed, in terms of its recommended use, and whatever potential effect size estimator may have been available under the various circumstances where that procedure would have been appropriate. Finally, a general discussion was offered regarding how non-parametric statistical procedures can be utilized in research.

12:00 p.m. **CONCLUSION OF ANNUAL MEETING**

MSERA CONSTITUTION AND BYLAWS

CONSTITUTION AND BYLAWS OF THE MID-SOUTH EDUCATIONAL RESEARCH ASSOCIATION
(As Amended November 12, 1992)

CONSTITUTION

ARTICLE I

NAME AND MEMBERSHIP

The organization shall hereafter be known as the Mid-South Educational Research Association. Any person who supports the purposes of the Association shall be eligible for membership and shall be an active member in this organization upon payment of annual dues as provided in the bylaws.

ARTICLE II

PURPOSES

The Mid-South Educational Research Association shall be a non-profit incorporated educational organization whose purposes are to encourage quality educational research in the Mid-South and to promote the application of the results of quality educational research in the schools.

Said corporation is organized exclusively for educational and scientific purposes; i.e., as a non-profit educational organization whose purpose is to encourage and provide results of quality educational research in elementary and secondary schools and in institutions of higher learning, including, for such purposes, the receipt of donations and books to further educational research and the making of distributions to organizations that qualify as exempt organizations under section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provisions of any future United States Internal Revenue Law).

No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from corresponding provision of any future United States Internal Revenue Law) or (b) by a corporation, contributions to which are deductible under section 170 (c) (2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

In the event of dissolution of the corporation, any assets remaining after paying all liabilities shall revert to and become the property of an organization which is qualified under section 501 (c) (3) of the Internal Revenue Code of 1954 amended.

ARTICLE III

INCORPORATION

The Association shall be incorporated upon provision of the laws of the State of Mississippi.

ARTICLE IV

OFFICES AND TERMS OF OFFICE

Section 1.a. The governing body of the Association shall consist of a President, Vice-President/President-Elect, Secretary-Treasurer, Immediate Past-President, Directors, and Executive Secretary, who are members of the Association. These officials shall constitute the Board of Officers and Directors of the Association (hereafter called the Board of the Association). The term of office for each elected official shall begin on the first day of the calendar year following election to the Board of the Association.

b. The Directors shall consist of four members at large; one from among the representatives of elementary-secondary schools; one from among the representatives of the State Departments of Education; and one from each of the constituent states.

Section 2.a. The Officers of the Association who serve as Vice-President/President-Elect and Secretary-Treasurer shall be elected at the Annual Meeting of the Association to terms of one year for the Vice-President/President-Elect and two years for the Secretary-Treasurer. The Vice-President/President-Elect shall succeed automatically to the office of President for a term of one year upon completion of a term as a Vice-President/President-Elect or upon the occurrence of a vacancy in the office of President. Each officer shall serve until a successor assumes office except for the Vice-President/President-Elect who would succeed to the office of President due to a vacancy in the office.

b. The Directors of the Association shall be elected for a term of two years. The Directors elected at large, the Director representing the elementary-secondary schools, and the Director representing the State Departments of Education shall be elected at the Annual Meeting during odd-numbered years, and the Directors representing the states shall be elected at the Annual Meeting during even-numbered years. Each Director shall serve until a successor assumes office.

c. All elective Officers and Directors will be eligible for reelection to the offices that they hold for one additional term except the Vice-President/President-Elect, who is restricted to one term, and the Secretary-Treasurer, who is not restricted as to the number of terms served.

d. In case a vacancy occurs in the office of Secretary-Treasurer or among the Directors, the successor to fill the vacancy shall be named by a majority vote of the Board of the Association. If a vacancy occurs in the office of Vice-President/President-Elect, the office will be filled by election at the next Annual Meeting of the Association. Any person who is named to fill an unexpired term shall be eligible for election to the office to which the appointment is made.

Section 3. The Immediate Past-President of the Association shall be an ex officio voting member of the Board of the Association and shall serve during the term of office of the successor as President.

Section 4. The Board shall appoint an Executive Secretary of the Association who will be an ex officio non-voting member of the Board and will serve at the pleasure of the Board.

Section 5. The President, Vice-President/President-Elect, Secretary-Treasurer, and Immediate Past-President shall constitute the Executive Committee of the Board. The Executive Secretary will serve as an ex officio non-voting member of the Executive Committee.

Section 6. The Officers, Directors and Executive Secretary of the Association shall be residents of the constituent states during their terms of service on the Board. Any vacancy on the Board that occurs as a result of a failure to comply with this requirement shall be filled in the manner prescribed herein for the respective office.

ARTICLE V

MEETINGS OF THE BOARD OF THE ASSOCIATION

The Board of the Association shall hold at least two meetings per year at sites designated by the President. One meeting shall be held for the purpose of outlining and planning activities for the Association's Annual Meeting including the program for the Association, approving the annual budget, approving changes in the constitution and bylaws, and discussing such other matters of business that need to be addressed at that time. The second meeting shall be held prior to the Annual Meeting of the Association for the purpose of finalizing program plans, acting upon proposed changes in the constitution and bylaws, and conducting such other business as the President or other members of the Board may deem necessary.

ARTICLE VI

NOMINATION AND ELECTION OF OFFICERS AND DIRECTORS

Section 1.a. A slate of nominees for Officers and Directors to be elected at the Annual Meeting of the Association will be named by a committee appointed by the President and composed of equal representation from each of the constituent states.

b. Nominations for any position may be made to the committee by any active member of the Association, provided that the member secures (1) the written permission of the nominee and (2) the signatures of four other active members endorsing the nomination. The committee shall establish and announce a deadline for receiving nominations.

Section 2. The nominating committee shall announce the nominations for all positions, direct the preparation of ballots, and conduct the election. The President will announce the results of the election at the business session of the Annual Meeting of the Association.

Section 3. The elective Officers and Directors of the Association shall be named by secret ballot of the members attending and voting at the business session of the Annual Meeting of the Association. A majority of the votes cast shall be required to elect Officers and Directors except for the Directors elected at large. A plurality of the votes cast on ballots for Directors elected at large shall be required for election.

Section 4. Each Director representing a constituent state shall be elected by the members of the Association who are from the state represented by the respective Director.

ARTICLE VII

MEETINGS OF THE ASSOCIATION

The Association shall hold an annual meeting at such time and place as is designated by the Board of the Association.

ARTICLE VIII

BYLAWS

The Association may adopt such Bylaws as are necessary for its operation by a majority of the active members present and voting at any Annual Meeting of the Association. Such Bylaws shall not be in conflict with the provisions of this constitution. Bylaws or their modification may be proposed by an active member of the Board of Directors or any active member of the Association.

ARTICLE IX

AFFILIATIONS

A state research association whose members are desirous of promoting the purpose of this Association and sharing in its work may become affiliated with this organization as provided in the Bylaws.

ARTICLE X

AUTHORITY FOR CONDUCTING MEETINGS

Section 1. Robert's Rules of Order shall serve as the guide to be followed in conducting all regular and special meetings of the Association and the Board of the Association. At the beginning of each session, the President will name a parliamentarian to advise on all parliamentary questions during the meeting.

Section 2. This constitution shall go into effect immediately upon acceptance by a three-fourths majority vote of the members of the Board of the Association attending and voting at a regular Board meeting and by a three-fourths majority vote of the members attending and voting at a regular meeting of the Association.

ARTICLE XI

AMENDMENTS

Section 1. This constitution may be amended at any time by written recommendations of any active member, provided that (1) the member secures signatures of four other members to the proposed amendment, (2) the member submits this petition to the Board of the Association for action no less than six months prior to the Annual Meeting of the Association, (3) the amendment is approved by a two-thirds majority vote at a minimum of two meetings of the Board, and (4) the amendment is approved by a two-thirds majority vote of the active members attending and voting at the Annual Meeting of the Association.

Section 2. The activities of the Association shall be regulated by the Bylaws. These may be amended at any Annual Meeting by a majority vote of those present and voting, provided that written notification of the prospective amendment has been given to the members prior to the Annual Meeting.

BYLAWS

ARTICLE I

CONSTITUENT STATES OF THE ASSOCIATION

The constituent States of the Association include Alabama, Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee.

ARTICLE II

DUTIES OF THE OFFICERS AND DIRECTORS OF THE ASSOCIATION

Section 1.a. The President shall preside at all regular and special meetings of the Association and all regular and special meetings of the Board, or shall designate an individual to assume this responsibility.

b. The President shall ensure the coordination of all activities of the Association through cooperative efforts with the Executive Secretary, shall represent the Association at all regular and special functions, shall speak for the Association at all times while serving as President, and shall prepare the annual budget.

c. The President shall appoint committees of the Association as necessary to perform specific responsibilities with the chair of each committee serving as a non-voting representative to the Board.

d. The President shall appoint editors for the Proceedings of the Annual Meeting and any periodic publications of the Association with each editor serving as a non-voting representative to the Board.

Section 2.a. The Vice-President/President-Elect shall assist the President at all times. In the case of the resignation or incapacity of the President, the Vice-President/President-Elect shall assume the office of President and complete the unexpired term. In such case, the Vice-President/President-Elect shall also serve the subsequent full term as President that would have accrued by succession to the office.

b. The Vice-President/President-Elect shall be responsible for the preparation and dissemination of current revisions and additions to the Operations Manuals of the Association. These materials shall be distributed at biannual meetings of the Board and the committee chairpersons as appropriate.

Section 3.a. The Secretary-Treasurer shall conduct the correspondence for the Association, keep minutes and records for all regular and special meetings of the Association, keep minutes and records for all meetings of the Board, keep account of and report all monies received, write checks as authorized by the Board, and supervise registration at the Association's Annual Meeting.

b. The Secretary-Treasurer shall prepare and distribute minutes to the Board Members for any regular and special meetings within six weeks after the conclusion of each meeting. Unless there is written notice from any Board Member within four weeks after the distribution of the minutes concerning errors in the minutes, these shall become the official record of the proceedings of the meeting upon approval by the Executive Committee of the Board.

c. The Secretary-Treasurer shall prepare and submit the books of the Association for an annual audit to be conducted after the close of the business year by an active member, other than the incoming or outgoing Secretary-Treasurer, appointed by the incoming President.

Section 4. The Directors elected at large shall attend all regular and special business meetings of the Board, stimulate interest in the membership of the Association and perform such responsibilities as are designated by the President.

Section 5. The Directors who represent the elementary-secondary schools and the State Departments of Education shall attend all regular and special meetings of the Board, coordinate activities within these groups, actively solicit memberships in the Association from their respective groups, and perform such responsibilities as are designated by the President.

Section 6. The Directors who represent the various states shall attend all regular and special meetings of the Board, solicit memberships in the Association from their states, and perform such responsibilities as are designated by the President.

Section 7.a. The Executive Secretary shall be responsible for coordinating the work of the Association and serving as advisor in all activities of the Association.

b. The Executive Secretary shall provide liaison with other professional organizations and entities on behalf of the Association.

c. The Executive Secretary shall provide a repository of historical documents and records of the Association.

d. The Executive Secretary shall maintain a current compilation of the policies and procedures approved by the Board.

e. The Executive Secretary shall maintain records of membership for the Association.

f. The Executive Secretary shall perform business and communication functions of the association as directed by the Board.

Section 8.a. The Executive Committee of the Board will meet on call of the President of the Association. The committee shall have general supervision of the affairs of the Association between meetings of the Board, shall make recommendations to the Board on any matters affecting the Association, and shall perform such other duties as the Board may assign to the Executive Committee.

b. Notice of all meetings of the Executive Committee and actions taken at these meetings shall be reported promptly to the entire membership of the Board. Actions of the Executive Committee shall be in conformity with these Bylaws and shall be subject to approval of the Board at its next meeting.

ARTICLE III

MEMBERSHIP DUES AND OTHER FEES

The Board of Directors has the authority during any budget year to establish the annual dues and also fees effective the subsequent year.

ARTICLE IV

BOARD OF DIRECTORS

The absence of a Board Member from two meetings during a term of office shall constitute grounds for declaring the office vacant. In such case, the Board shall determine the reasonableness of the absences. If the Board deems that the absences are without merit, it shall declare the office vacant. In the case of an elective office except for the office of Vice-President/President-Elect, the successor to fill the vacancy shall be named by a majority vote of the Board of the Association.

ARTICLE V

AFFILIATION WITH THE ASSOCIATION BY STATE RESEARCH ASSOCIATIONS

Section 1. The Association may establish affiliate relationships with state research associations in the Association's region that promote the purposes of the Association.

Section 2.a. The Association shall act on a request for affiliation by a state research association upon the submission to the President of the Association of a petition requesting affiliation which has been approved by the membership of the state research association and a copy of the constitution and bylaws of the state research association.

b. The establishment of an affiliate relationship between the Association and a state research association must be approved by a majority vote of the members of the Board of the Association attending and voting at a Board meeting and a majority vote of the members of the Association attending and voting at the Annual Meeting of the Association.

Section 3.a. The affiliate relationship between the Association and a state research association shall have as a provision that each organization may appoint a non-voting representative to serve on the board of its affiliate organization. The appointment of the Association's representative to an affiliated state research association shall be made by the President. The appointment of the state research association representative to the Board of the Association shall be made in the manner prescribed by the state research association.

b. The Association and an affiliated state research association shall advise their members of the activities of both organizations. Each organization shall encourage membership and participation in the other organization by persons from the state served by the state research association.

c. The Association and an affiliated state research association shall advise their members of the activities of both organizations. Each organization shall encourage membership and participation in the other organizations by persons from the state served by the state research association.

d. The Association and an affiliated state research association may cite their affiliation with each other where appropriate and desirable. The Association shall be identified as the senior organization because of its multi-state, regional scope.

e. The affiliation between the Association and a state research association shall not infringe upon the autonomy of either organization nor cause either organization to incur any responsibility for the financial obligations of the other organization.

f. The affiliation between the Association and a state research association may be terminated at any time by the decision of either organization. The decision by the Association to terminate the affiliation with a state research association must be approved by a majority vote of the members of the Board attending and voting at a Board meeting and a majority vote of the members of the Association attending and voting at the Annual Meeting of the Association.

g. Membership of an individual in either the Association or an affiliated state research association shall not constitute nor imply membership in the other organization.

ARTICLE VI

ARCHIVES OF THE ASSOCIATION

Section 1. The Board of the Association may designate one or more educational agencies and/or institutions to serve as official archives of the Association.

Section 2.a. The establishment of archives for the Association shall require approval by a majority vote of the members attending and voting at any regular Board meeting.

b. Archives shall be established by entering into a formal agreement between the Association and an educational agency or institution that includes specifications of the materials to be placed in the archives, the operational procedures for maintaining the archives, the services to be provided for users, and other matters as determined by the Board and the agency or institution.

c. Any educational agency or institution that maintains archives for the Association shall be located within the Association's region.

Section 3.a. An educational agency or institution that maintains archives of the Association shall comply fully with the specifications in the agreement with the Association. Failure to comply with these specifications will constitute cause for termination of the agreement by the Association.

b. The archives must be organized and maintained in such manner that the contents are readily identifiable, accessible, and retrievable to serve users.

c. A report on the status and operation of the archives shall be made at least annually to the Board by the agency or institution that maintains archives of the Association.

Section 4.a. The agreement between the Association and an educational agency or institution that maintains archives for the Association may be terminated by a decision of either party.

b. A decision by the Board of the Association to terminate such an agreement must be approved by a majority vote of the members attending and voting at any regular Board meeting.

c. Written notification of termination by either party shall be given to the other party and must include a delineation of the reason for the decision.

PAST PRESIDENTS OF MSERA

PAST PRESIDENTS OF MSERA

1996	David T. Morse
1995	Glennelle Halpin
1994	Diana Lancaster Gardiner
1993	Robert L. Kennedy
1992	Judith A. Boser
1991	Gypsy Abbott Clayton
1990	John R. Petry
1989	Carl R. Martray
1988	Carolyn Williams
1987	William Deaton
1986	John Thornell
1985	Carolyn Reeves-Kazelskis
1984	Robert Rasmussen
1983	Ronald Adams
1982	James E. McLean
1981	Neil Amos
1980	Harry L. Bowman
1979	Robert E. Bills
1978	Charles Babb
1977	Doug McDonald
1976	Virginia Horns-Marsh
1975	Fred K. Bellott
1974	George Gaines
1973	Walter Matthews

MSERA AWARDS

MSERA AWARDS

OUTSTANDING RESEARCH PAPER AWARD WINNERS

1996	Pat Wachholz and Carol Etheridge
1995	Christopher H. Skinner, Patricia Logan, Gregg A. Johns, and Sheri L. Robinson
1994	Yi- Cheng Wu and James E. McLean
1993	Alan S. Kaufman, Jane Ford-Richardson, and James E. McLean
1992	B. A. Nye, C. M.Achilles, J. Zahorias, D. Fulton,
1991	Robert L. Kennedy, Jianliang Wang, and Gene Harryman
1990	Marion Dana, Anthony Scheffler, Mark Richmond, Sandra Smith, and Howard Draper
1989	Jeffrey Gorrell
1988	James E. McLean and Alan S. Kaufman
1987	Larry Webber, Bruce Thompson, and Gerald S. Berenson
1986	Joan M. Butler, David DeRuzzo, John P. Wollenberg, and Herbert M. Handley
1985	Charles M. Achilles and M. Nan Lintz
1984	James Flaitz
1983	James M. Prater, Jr.
1982	Debra Joyce Steele
1981	Linda Newby
1980	Ruth Bragman
1979	Charles E. Standifer and Ernest G. Maples
1978	Robert E. Bills
1977	Robert H. Bradley and Bettye M. Caldwell

HEBERT HANDLEY DISSERTATION/THESIS AWARD

1996	Rebecca McMahon	1993	Colleen C. Johnson
1995	Malenna A. Sumrall	1992	Michele G. Jarrell
1994	Jayne B. Zaharias	1991	Margaret L. Glowacki

DISTINGUISHED DISSERTATION/THESIS AWARD

1990	Kevin Hughes	1987	M. Nan Lintz
1989	Gloria A. Turner	1986	Esther M. Howard
1988	Soo-Back Moon	1985	Anne Hess

HARRY L. BOWMAN SERVICE AWARD

1995	James E. McLean	1993	Judith A. Boser
1994	John R. Petry	1992	Harry L. Bowman

MSER FOUNDATION RESEARCH GRANT

1996	Denise Johnson	1995	Cindy Williams

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